Business Continuity Planning Guidelines for an Infectious Disease Outbreak

(Full Version)

2020.04

All companies need to have their 'Corporate Business Continuity Plan (BCP)' in readiness so they can respond efficiently and effectively in case of a crisis such as an infectious disease outbreak.

This guideline document suggests reference key contents and example forms that medium or large-sized companies shall include in their BCPs. Please apply the suggestions with appropriate discretion based on your company's specific situations and characteristics.

** This document is available for download from websites of the Ministry of Trade, Industry and Energy (MOTIE), major economic organizations, and industry associations, as well as from the Coronavirus Disease-19 site of the Korea Centers for Disease Control & Prevention (KCDC).

* All government directions related to COVID-19, including this document, are available from the Coronavirus Disease-19 website (ncov.mohw.go.kr).



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I. Introduction

Purpose of a BCP for an infectious disease outbreak

• Business Continuity Planning (BCP):

A Business Continuity Plan is a prepared crisis response system that enables prompt and systematic response allowing the critical businesses to continue in the middle of a crisis.

• **Objectives**:

The spread of an infectious disease costs companies a massive loss of human and physical resources.

 \rightarrow A BCP can: 1) protect people such as employees and customers; and 2) minimize the company's loss by helping to prevent business disruption and to deliver on contracts.

Infectious diseases

• Infectious diseases are caused by various pathogens such as bacteria, parasites, etc. and spread through food intake, breathing, or contact with an infected person.

< Coronavirus Disease (COVID-19): An Overview >

- · (Source) Presumed of animal origin
- (Transmission route) Likely to be Animal \rightarrow Human \rightarrow Human
- The disease spreads from person to person when one comes into contact with respiratory droplets of an infected person, and then touches his/her own eye, nose, or mouth. There are also confirmed cases of secondary infection between family members and at medical facilities.
- · (Clinical symptoms) Fever, respiratory symptoms (cough, difficulty breathing), pneumonia
- (Incubation period) 1~14 days (4~7 days on average)
- (Treatment) Symptomatic treatments such as IV drip, fever-reducing medicines, no specific antiviral drugs are available at present.

• Impact of infectious diseases on businesses (examples)

- Shortage of human resources, including full-time employees, temporary staff, and contractors (due to quarantine, having to look after family members like offsprings, or having to avoid public spaces)
- Customer order cancellations or procedural delays in exports
- Supply chain issues such as suspended supply of raw and auxiliary materials
- Changes in demand for specific items or services such as sterilizers, masks, and delivery services
- Limitations on business trips and meetings

1. Main contents

 Setup of an emergency organization chart and roles & responsibilities 	Develop an emergency organization structure ahead of time and clearly define roles and responsibilities for each team and team members so the business can respond to emergencies in an orderly manner
② Analysis of critical business functions	Determine the types and scope of critical business activities that must continue during a crisis
③ Identification of necessary resources and alternative sourcing plan thereof	Identify types and size of core team members and essential resources to support critical business functions. Develop a plan to secure the resources if a shortage is expected
(4) Communication planning	Prepare internal and external contact network for employees, customers, business partners, and contractors. Train not only employees but also secondees and contracted workers on the guidelines.
S Preparedness for an infectious disease outbreak	Disinfect the workplace and maintain hygiene. Have necessary supplies such as disinfectants ready. Learn how to respond if there is a confirmed case.

2. Timing: The national disaster management system consists of four-tiers: attention (blue)

 caution (yellow) - vigilance (orange) - serious (red). We recommend that companies set up and implement their BCPs according to the Korean government's crisis alert level.

Γ	Disaster management tiers (Alert level)				
① Attention (Blue)	The occurrence of an infectious disease starts in Korea, or a new contagious disease emerges and spreads overseas.				
② Caution(Yellow)	A domestically occurring infectious disease spreads limitedly, or a new infectious disease enters Korea from overseas.	Set up BCP			
③ Vigilance (Orange)	The domestically occurring infectious disease spreads in local communities, or the new infectious disease from overseas spreads limitedly.	Prepare to implement the BCP (Notify all employees, update contact details and inventory of supplies)			
④ Serious (Red)	The domestically occurring infectious disease spreads countrywide, or the new contagious disease from overseas spreads in local communities or countrywide.	Implement the BCP			

I. Establishing a Business Continuity Plan

Emergency organization structure

An emergency organization structure is critical to make prompt and appropriate decisions and to maintain control of the situation.

A manual comprised of a clear definition of roles, responsibilities, and authority for each team minimizes confusion and enables an immediate and systematic response in case of an infectious disease outbreak.

• Develop an emergency organization chart and clearly define the roles of each team and individual.

(^{CSP} Refer to Form 2 ^CBCP Emergency Organization Chart₁ and Form 3 ^CBCP Business Response System₁)

< Infectious Disease Response Organization and Roles (Example) >

Gov. Organization		Emergency Res	ponse	Committee	
KCDC Local government		 Chairman: CE Members: Fun 	-	heads	
Public health center	Medical Advisor	y Team		Emerge	ncy Response Team
	 Provides medical a the outbreak of an disease 			instruction response · External c communic governme relevant ir	ommunications: deliver s of the emergency communications: maintain ation channels with nt organizations and hstitutions a reporting line

Response Teams						
Operation & Management	Logistics	Information Management	Recovery Support	Industrial Health	PR	
 Manage business operations, customers and business branches Administer the business funds and manage expenses Implement a work-from-home system 	Manage the necessary supplies and services upon outbreak of an infectious disease (Hygiene kits, disinfectants) Manage contractors	 Collect information Set up a DB for technical staff Maintain health information of employees 	 Backup major data and manage storage Provide substitute staff and technical support Manage the return of absentees 	 Manage infections occurring to employees and customers Monitor the outbreak status 	 Prepare and distribute press releases Draw up and announce briefs 	

<Example of the main roles of an emergency organization>

1) Emergency Response Committee

- Make decisions for business continuity based on the Korean government's alert level for infectious disease
- · Chairman: Top decision-maker, such as CEO
- Committee members: People in charge of each function

② Emergency Response Team

- · Communicate internally by delivering instructions of the emergency response committee
- Communicate externally by maintaining communication channels with government organizations and relevant key institutions
- Establish a reporting line

③ Medical Advisory Team

- Appoint medical experts (industrial physicians) and health managers (occupational health nurse) who can provide medical advice and emergency treatment upon outbreak of an infectious disease
- In the absence of the appointees, a designated treatment hospital or local public health centers can give medical advice

④ Response Teams

 Implement the business continuity plans for each function, such as the operation & management team, logistics team, recovery support team, information management team, industrial health team, and PR team

Teams	Examples of roles and responsibilities
Organstian Ri	 Manage business operations, customers and branches in case of an outbreak
Operation & Management	 Administer and supervise all business funds and expenses in case of an outbreak
	 Develop and implement a work-from-home system
Logistics	 Manage supplies and services necessary upon outbreak of infectious disease (hygiene kits, sterilizers, etc.)
•	Manage contractors
Information	 Collect information and secure resources affecting business operations in case infectious disease occurs
Management	 Develop a database of technical staff
-	 Manage employees' health information
	 Back up major data and manage storage
Recovery	Provide substitute staff and technical support
Support	Manage the return of absentees
Industrial Health	 Manage infection occurring to employees and customers (monitoring of outbreak)
	Prepare and distribute press releases
PR	Write briefs and make annoucement
	Appoint a public information office

 Preparation and bearing of individual responsibility cards help team members to understand their roles and to build a regular contact network. (See Refer to Form 4 Individual responsibility management card) Identification of critical businesses,

necessary resources, and available resources

- Identification and prioritization of critical businesses, core team members, essential technologies, and necessary resources, followed by appropriate response planning, allows immediate and efficient response upon occurrence of a crisis.
- ★ A specific provision plan, enabled through the analysis of current resources and the assessment of type and quantity of resources that can be procured during an outbreak, reduces recovery time.
- 1. Identification of critical business and core team members
 - Prioritize business functions
 - Which division within the organization is the 'key functional department'?
 - Who are the core team members necessary to maintain the 'key functional department'?
 - What is the substitute plan for staff and technical support in the event of a higher rate of absence?
 - Who are the key employees required for the implementation of the Business Continuity Plan?
 - **Prioritize business functions** (e.g., Branch No. 1, Factory No. 1, or Department A) and **determine their core responsibilities** (e.g., development, production, or supply of Product A).

($\ensuremath{\mathbb{C}}$ Refer to Form 5 $\ensuremath{\mathbb{C}}$ Core Business Specifications, Form 6 $\ensuremath{\mathbb{C}}$ Classification of Core Business Functions,)

- Identify core employees considered indispensable for key business functions and prepare for **their possible absence** (e.g., core technology expert or top decision-maker)
- Establish guidelines for appointment of substitute staff, delegation of authority, and succession of responsibility if core employees become absent.

<Reasons for employee absence during an infectious disease outbreak>

- If the employee is confirmed or suspected of infection, or reluctant to return to work after recovery.
- If the employee needs to stay at home to attend to a patient
- If the employee needs to look after children in case of school closure
- If it is safer to stay home

(Refer to Form 7 ^{[Alternative} Work Plan_])

2. Management of resources (Physical and information resources)

- Determine **essential resources** to maintain the critical businesses, estimate types and volume of other required resources, and take stock of their current availability. (e.g., people, equipment, facility, IT, data, communications, contractors, suppliers, and other infrastructure)
- Identify areas where a sudden peak of demand or a shortage of supplies is anticipated in the event of an outbreak and develop a resource supply plan accordingly. (e.g., expected increase in online shopping and demand for delivery services, higher demand for disinfectants and daily necessities)
- Develop an alternative sourcing plan for resources for which shortage of supply expected, and investigate backup transportation modes if the current means of transportation becomes unavailable.

(Refer to Form 8 Management Resource Checklist for Each Function))

- Back up critical data and other information necessary for core business functions and develop data access plan in case of workplace closure.
- Estimate the maximum bearable period of no operation if critical data become unavailable.

3. Financial resources

- Evaluate **available budget**, estimate the accessible amount of funds, and establish how to access the funds.
- Make a **list of insurance policies** (contract period, the limit of liability, and coverage) the company has.

(Refer to Form 9 Available Fund and Insurance Policy Catalog)

4. Hygiene and cleaning supplies for the prevention of infection

• Examine the current inventory and estimate the required volume of hygiene and cleaning supplies in case of a prolonged outbreak of infectious disease (e.g., Soap, hand sanitizer, disposable mask, thermometer, tissue, personal protective equipment, disinfectant, and cleaning supplies)

(Refer to Form 10 "Hygiene and Cleaning Supplies Inventory)

Contact information and communication planning

- Internal and external emergency contact networks and seamless communications help to prevent scaremongering and allow an organized response.
- ♣ It is beneficial to conduct **company-wide training** on the infectious disease and provide employees with corresponding action guidelines in acting together against an infectious disease outbreak.

1. Internal and external emergency contact networks

- Set up emergency contact networks to check up on the health status of employees and deliver guidelines as to how to respond during an outbreak of infectious disease.
 - How many employees are at higher risk of infection due to pre-existing medical conditions or other health issues?
 - How many employees are with disabilities or live alone, requiring support if they fall ill?
 - How many employees need to stay at home to look after children in case of school closure?
 - How many employees need to stay at home to attend to infected family members due to the small size of their family or other circumstances?

(Therefore to From 11 『Employee Contact Network and Health Status Checkup』)

• Set up emergency contact networks with **distributors**, **business partners (suppliers and service providers)**, and **customers** in order to exchange information on the status of the outbreak and update all concerned parties on actions taken internally and externally.

(The Refer to Form 12 [Internal and External Stakeholder Management])

• Manage contact details of **government organizations responsible for management of infectious diseases** such as the local public health center and monitor their updates and notices on a regular basis.

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2. Seamless communications

- Inform all employees of confirmed cases if there are any. Transparency in updating the status of infection within the organization prevents scaremongering.
- Use different communication channels rather than face-to-face communication to minimize contact among employees if there are several confirmed patients.
- Apply the principles of communications not only to the company employees, but also to anyone **who enters the workplace** (including contractors, secondees, outsourced staff, and freelancers such as cleaners, canteen staff, and delivery people)

(The Refer to Form 14 Internal and External Communications)

3. Employee training

• Anyone who enters the work premises should receive training that covers basic information on infectious diseases, company and location specific countermeasures, and

self-management guidelines. 'Anyone' includes all visitors as well as employees, secondees or contracted workers.

4 Coping with crisis situations

- Assume crisis situation that can occur due to infectious diseases, etc., caused by lack of goods and large-scale employee absences, and conceive respective countermeasures beforehand.
- Establish coping principle upon occurrence of cases, share with all employees, and minimize confusion upon actual occurrence of situation.
- Check related guidelines and provisions such as government instructions, and prevent spread of infectious disease within company by maintaining cleanliness in business site and independently conducting disinfection measures.

1. Create scenario for each crisis situation, and provide for countermeasures

<Situations that can occur upon the occurrence of an infectious disease (Example)>

Situation ① Lack of goods, such as raw materials - Massive lack of goods due to surge in demand for hygiene products

- Lack of materials due to increase in demand for certain services (door-to-door services, etc.)
- Absences of delivery personnel of product transport companies, and suspension of production by suppliers, resulting in impossibility of provision of supply

(137 Refer to Form 8 < Management Resource Checklist for Each Function>)

o Establish plan to prepare for situation in which there is shortage of supply material

- Assess alternative business partners and contact them
- Stockpile materials and goods to prepare for the occurrence of an infectious disease

o Corporate plans to manage goods suppliers (business partners)

- Assess whether business partners have established a business continuity plan, and conduct discussions
- Establish plan for alternative human resources in preparation for massive employee absences at goods suppliers, as well as for operations reallocation
- Discuss means of communication upon contingency

Situation Situation Financial difficulty due to drop in exports and suspension of operations (** Refer to Form 9 <Status of Available Funds and Subscribed Insurances>) (** Refer to Form 15 <Emergency Loan Plan>) o Accurately assess financial status

- Calculate current financial level and necessary level
- Check list of subscribed insurances
- Check for insurance policies that include conditions such as extension of payment period upon the occurrence of disasters, or payment in cash before maturity
- o Check whether assistance can be received from related organizations such as financial institutions, clients and mother companies (or subsidiaries)

o Check description of financial assistance announced by government

Situation **③** Large scale absences due to spread of an infectious disease (IFF Form 7 <Alternative Work Plan>)

- o Implement preemptive coping measures to minimize damages from spread of an infectious disease - Prevent spread of infectious disease through social guarantine, such as working from home, remote
- work, shifts
- Provide measures for management of employees and their health information
- o Assess whether core personnel can work, what the number of employees that can work is, and which areas are operable
- Check number of insufficient workers and work areas, acquire alternative human resources (designate substitute, delegate authorities)
- o Establish work reallocation plan to minimize operation gaps due to absences
- Establish alternative shifts and reallocate operations to apply in contingency
- Consider alternative work places and adjust work hours (flexible work hours)

2. Case management and disinfection when there are suspect/confirmed cases

- When a suspect/confirmed case occurs, the government instructions as below are to be read carefully and followed as a response
- * Related coping guidelines can be subject to change according to the progress of the infectious disease. Please refer to the most updated guidelines [Reference 2]
- Upon the occurrence of a case, a list of confirmed cases and contacts must be prepared, in order to assess the movement route of the confirmed case
- * The manager must not face the suspect case directly, and receive the report by telephone. The employee that faces the suspect case directly or is in charge of him/her must wear personal protective gear (mask, single-use gloves, etc.)
 - (127 Refer to Form 16 <Form for Response to Suspect/Confirmed Cases>)

< Coping Measures Upon Occurrence of Suspect/Confirmed Cases >

	(Notify) Upon the occurrence of an employee or visitor showing symptoms of an infectious disease, immediately notify the intra-company manager in charge of infectious diseases (Emergency Response Team, Industrial Health Team) by telephone
	(Report) When a suspect case is discovered on the business site, check for symptoms and instruct the case to wear a mask. Immediately report to the health center or CDC call center 1339
Suspect Cases	(Quarantine) The suspect case or a contact shall not move until an inspection by the health center, as well as an epidemiological survey, is conducted. He/she shall wear personal protective gear (mask, single-use gloves, etc.) in an isolated area within the business site, and wait for the health center personnel to arrive
	(Disinfection) After transferring the suspect case to the health center, one shall wear personal protective gear (mask, single-use gloves, etc.), and use disinfectants such as alcohol and rox to disinfect the quarantine area where the patient was waiting
	(Authority report) Persons selected as subject to self-quarantine by the health authority shall not go to work, and report by phone to the manager. He/she shall stay in a hospital or be subject to self-quarantine according to the instructions of the health authority
	(Work adjustment) Alternative work schemes are planned and adjusted during the period of absences

Confirmed Cases	(Announcement) When a confirmed case has been detected at work, this fact shall be immediately announced to all workers in the business site (This includes workers that are employed by business partners, dispatched by third parties, or members of service companies, etc. working together in the business site)
Cases	(Assess contacts) Persons that have contacted the confirmed case (having come within 1m face-to-face with the patient for conversation) shall be assessed, and included in a list, to be managed and, if necessary, submitted to the health authority

- The quarantine area and manager for each business shall be designated beforehand and notified to all employees
- The type of disinfectant, scope of disinfection, air refreshing time, scope of closure, etc. shall be prescribed based on response measures

(we Refer to Form 17 <Plan for Disinfecting and Closure of Business Site upon Occurrence of Confirmed Cases>)

3. Management of Business Site

- Maintain cleanliness of business site
- Maintain clean and disinfected business site for sinks, door handles, handrails, wash basins
- Remove magazines and newspapers placed in lounges, pantries, waiting rooms and other public spaces
- Refresh the interior on a regular basis with an appropriate air conditioning system or by opening the window

< Tips for Managing Business Site >

	X Upon the occurrence of an infectious disease, it is important to reduce interpersonal contact as much as possible, in order to minimize the risk of spreading of the infectious disease among employees
	 Recommend teleconferences (use of telephone, video conference, Internet), working from home, flexible work hours, shifts
	- Minimize business trips, conferences, workshops, training
	- Prohibit get-togethers in lounges or other social spaces
Minimize contact	 When face-to-face meetings are inevitable, try to opt for a large conference room (where at least 1m distance can be maintained between people). Refrain from shaking hands or hugging, conduct meetings in an open space if possible, and reduce meeting hours
	 Recommend employees to refrain from holding/partaking in social events involving leisure or religion in which there is risk of contact with an infected person
	 If there is a high frequency of contact with others, such as in the case of customer service representatives or drivers of vehicles of mass transportation, install protective glass shields
	 In the case of business sites, or closed spaces with high concentration of people, such as call centers, install a wall or shield, conduct shifts to minimize the number of people working at the same time, and take other necessary measures
Promote	- Attach an information poster on the entries/exits, shower rooms, sinks, and public places of all business sites
hygienic practices	 Make use of brochures, newsletters, email, employee bulletin board, wage payment statement, etc. and promote importance of hand hygiene and maintenance of clean surroundings during the outbreak of an infectious disease

- Thorough disinfection of business site
- The recommended method of usage and precautionary measures differ according to the disinfectant's ingredients. Thus, use must be in accordance with the applicable product manual
- The appropriate disinfectant must be chosen as suits the purpose of disinfecting. In order to heighten the effects of disinfecting, the same type of disinfectant should be chosen for continuous usage

(See Refer to Form 18 < Inspection of Business Site>)

<Rules for Safe Use of Disinfectants>

- Use after careful reading of the manual
- Do not mix with or use in conjunction with another disinfectant
- When diluting the disinfectant, adhere to rules regarding the dilution ratio
- Wear protective gear during use, such as a face mask
- When a person has been excessively exposed to the disinfectant, immediately wash it off with water
- Take measures to prevent environmental pollution due to the use of disinfectants

5 Recovery and Post-Crisis Measures

- ✤ Convert existing emergency organization system to one focused on recovery activity, and prepare a chart on recovery progress and plan
- ♣ Assess resources and costs necessary for recovery, and allocate resources according to priorities
- ♣ Notify recovery situation to business partners and local community

1. Deploy business recovery response system

- Restructure emergency organization system that was in operation during the occurrence of an infectious disease to one oriented towards recovery efforts
- Set a target timeline for recovery, and the target level of recovery, and establish an exclusive team focused on recovery (eg: Customer Management Team, Business Partner Support Team, Employee Management Team, Raw Materials Supply Team, Facility Management Team, Financial Management Team, etc.)

(Segregation of Duties of Recovery Team>)

• Select priorities in recovery activities, and analyze recovery activity plan, required resources and expenses for each recovery team

(Refer to Form 20 < Recovery Activities >)

2. Assess impact from suspension of core operations, establish response plan

- Upon suspension of companies' core operations, there must be an assessment of the impact for each time period in which the particular operation was suspended (eg. fund flow, customer flight, relationship with transaction partners, etc.)
- Recovery Time Objective for the recovery of major activities must be set by taking into account the maximum tolerable period of disruption (MTPD)*
 - * Maximum Tolerable Period of Disruption: The duration of time which the company can bear when the suspension of major activities continues, upon which irrecoverable damage is expected

(See Refer to Form 21 <Impact Assessment and Determination of Recovery Time Objective>)

• For each core operation, the expected damage level and risk level is assessed, and priority in recovery is determined. (eg. What are the contracts and supplies that must be implemented as a priority? What are the production lines that need to be restored first?) A response plan is established by using business resources according to priority

(The Refer to Form 22 < Calculation of Damages, Risk Assessment and Provision of Countermeasures for Each Core Operation>)

3. Employee return plan

• In order to allow employees that have no cause for absence, due to the complete recovery from the infectious disease, etc., to return normally to work, a list must be

maintained of employees that intend to return, and their expected return date must be assessed, in order to provide for an appropriate return procedure

(I Refer to Form 23 < Employee Return Plan>)

4. Review and Organization of the Business Continuity Plan (BCP)

• Review the established BCP implementation process and derive means of improvement.

Attachment Business Continuity Plan Checklist						
	Description	Completed	In progress	Not begun		
	Restructuring of the emergency organization system					
1	Do you have an emergency organization system that can be operated immediately upon a contingency?					
2	Are the roles and responsibilities of the emergency response team and its members clearly stated?					
	Assessment of core operations and essential resources					
3	Have the core operations of the company been assessed, and priorities established?					
4	Have you assessed the core personnel for business continuity, and provided for a response plan when core personnel or leaders of the organization are absent?					
5	Do you have an understanding of the required and available resources for the company's implementation of core operations?					
6	Are you fully equipped with hygienic products?					
7	Is there a means of managing an alternative supply network in the event of suspension of raw materials supply?					
8	Are you backing up important data necessary for continuity of the business?					
9	Do you have operating funds to prepare for a suspension of business? Do you have means of funding?					
10	Have you checked the company's insurance subscriptions and compensation range?					
	Deployment of contact network and internal/external communication					
11	Do you regularly update the list of contacts, such as that of employees, business partners and major clients?					
12	Have you checked the various guidelines provided by the government, such as for response measures at the business site level, rand studied them carefully?					
13	Is communication regarding the infectious disease being shared smoothly within the organization?					
14	Are employees and other contacts being provided with basic education on					

	Description	Completed	In progress	Not begun
	infectious diseases, and means by which individuals and families can prevent infection?			
	Response to crisis situation			
15	Have measures of response to occurrence of a suspect/confirmed case been prepared and informed to all members?			
16	Is there a plan in place within the company to prevent infection, such as measures to manage hygiene and frequently used facilities?			
17	Do you have in place alternative work plans that can be implemented in the event of large scale absences?			
	Recovery and Post-Crisis Measures			
18	Have you assessed the expected degree of damage during each period of work disruption (financial impact, client relations, etc.), and the time required for recovery?			
19	Have you established a recovery progress plan according to priorities, core operations, and status of available resources?			
20	Do you have an HR normalization plan including a procedure of return for employees that have recovered from an infection?			

Reference 1 Revisions to Disinfection Guidelines by the Central Quarantine Response Headquarters

The Central Quarantine Response Headquarters has revised its disinfection guidelines based on feedback from business sites.

Before revision, there was a unilateral recommendation to prohibit the use of business sites on the day following disinfection conducted due to exposure to a case.

However, through this revision, the guidelines have been adjusted so that the business sites can be used based on consultation with the quarantine authority in view of the type of disinfectant and the nature of the business site.

However, disinfecting the site with sodium hypochlorite (eg. Rox) could entail hazards such as odor, and in this case the site requires at least one day for sufficient ventilation. This is why it is recommended that the use of the disinfected business site be prohibited for one day.

When using a disinfectant with a different ingredient (eg. at least 70% alcohol content), the business can consult with the quarantine authority to adjust the time for reopening of the business site according to the situation and considering the nature of the disinfectant and the characteristics of the space subject to disinfection.

* For details on the method of disinfecting, and the type of disinfectant, check "Guidelines on Disinfecting Collective Facilities and Frequently Used Establishments of COVID-19 Cases" on the bulletin board titled "Collective Facilities and Frequently Used Establishments" of the Center for Disease Control's COVID-10 webpage ncov.mohw.go.kr.

Current	Revision
 ** The business site that was exposed to the case shall be subject to disinfection, and prohibited from use until two days later. The virus dies on the day of disinfection, but the space is prohibited from use for one day in view of potential hazards from exposure to traces of the disinfectant. 	 ** The nature of each type of disinfectant and the purpose of the space subject to disinfection are taken into account for adjustment of criteria to resume usage. The virus dies after disinfection, but the time to resume use can be determined in accordance with the nature of each disinfectant. Therefore, there cannot be a single relevant criteria, and each product's precautionary measures must be taken into account. When sodium hypochlorite (at least 1,000ppm) is used for disinfecting, the space can be used after sufficient ventilation (Use of space is limited for one day after disinfecting, and use must be resumed after providing sufficient ventilation).

<Description on Revisions to the Disinfection Guidelines>

Reference 2 COVID-19 Response Guidelines for 24 hour Operating Industries

* Industries similar to that below can apply these guidelines in a strict manner.

< Guidelines for Semiconductors and Displays >

□ Nature of Fabs (Semiconductor/display production facilities)

- (Entry conditions) The worker shall wear special clothing in the Smock Room to protect against dust^{*}, and enter the Clean Room equipped with production facilities after anti-dust processing (Air shower, two occasions, 30 seconds each)
 - * Dust-proof clothing, dust respirator (filter mask), dust-proof gloves, dust-proof shoes, dust-proof cap
- Automation facilities within the fab are controlled by the external control room (dust-proof clothing is not worn).
- $^{\circ}$ (Environment within Fab) The Clean Room maintains a cleanliness level of Class $1 \sim 100^*$. As the processing work is automated, only a few workers are at work, and close contact is limited^{**}

* Class 1: In a space of 1ft (30cm) in width-breadth-height, there is a dust particle the size of 0.5μ m (hair=30~120 μ m)

** Working spaces are at least 99~132m² per person. There is limited contact due to the mobilization of designated human resources per area.

- Inside the Clean Room, air flows from above and downwards at all times. The air passes through a high performance filter^{*}, that functions as a negative pressure room, at least 400 times an hour, promoting internal/external air circulation.

* Air that flows from outside to inside is filtered by a HEPA filter, while the air circulating internally is filtered with a ULPA filter.

□ Preparatory Measures

- (Alternative Human Resources) Before the occurrence of a confirmed case, alternative human resources must be acquired and a plan for adjustment of shifts must be prepared.
- Currently fabs have four teams and three shifts rightarrow Upon the occurrence of a confirmed case, to compensate for the self-quarantine of working teams in which the case occurred, alternative human resources equivalent to one shift shall be acquired.
- (Response System) Business Continuity Plan and an emergency response system must be provided for each company.
- Establish a Task Force Team, a Response Plan per Scenario, and Self-Quarantine

Criteria according to each company's situation, and pursue preemptive measures to prevent the spread of COVID-19.

• (**Protective Gear**) Prepare personal protective gear^{*} of Level D (at least two days' worth) to be worn by personnel of the Control Room when disinfecting. The existing dust-proof clothing is to be worn in the Clean Room.

* Personal protective gear of Level D: Full protective clothing + gloves + galoshes + mask(N95) + goggles

□ Plan for continued operation of production facilities

- (Occurrence of Suspect Case) Assess the suspect case and contacts, and instruct self-quarantine.
 - [Self-Quarantine] Self-quarantine of contacts assessed and notified by the health authority
 - In addition, through an independent company survey, assess all close/everyday contacts Close contacts must work at home for 14 days, while everyday contacts must wear a mask at work.
 - * (Close contact) Persons that come into contact with the suspect case in office, shift teams, shuttle bus, highly concentrated public facilities (Everyday contact) Persons that work in the same building as the suspect case
 - [Protective Gear] Staff shall wear a mask in the Control Room, and the existing dust-proof clothing in the Clean Room.
 - Before confirming that a suspect case is truly infected, persons may work without wearing additional protective gear.
 - [Alternative Human Resources] Establish alternative shift teams and mobilize them taking into account the manpower that requires self-quarantine.
 - * Close contacts shall be withdrawn, and subject to self-quarantine or work according to the measures advised by the health authority.
- (Occurrence of a Confirmed Case) Disinfection shall be conducted for the Control Room and Smock Room, while the Clean Room does not require disinfecting.*

* A separate disinfection procedure is not necessary when taking into account the cleanliness of the production facilities and working environment.

- [Scope of Disinfection] Disinfection is necessary for the Smock Room, Control Room and movement route of the confirmed case other than Clean Room.
- When disinfecting the Smock Room, please refrain from using disinfectants with chlorine (Cl) ingredients so as not to impact the process. Additionally, the disinfectant must have at least 70% alcohol.
- [Simultaneous Work] Personnel shall continue to work in the Control Room even during the disinfection process, after wearing protective gear.

- Unlike the Smock Room, the Control Room is difficult to close off. During the disinfection process, personnel working shall wear Level D personal protective gear (as in the case of a nuclear reactor), and must keep wearing it for 24 hours^{*} after disinfecting.
 - * Time required for sufficient ventilation, after disinfecting with sodium hypochlorite (Recommendation of the Central Accident Remediation Headquarters)
- When disinfecting, the period the Smock Room is to remain closed shall be discussed and determined in consideration of the disinfectant being used. When closing the Smock Room, an alternative Smock Room shall be used (for Men, Women, Business Partners, etc.).

< Guidelines for Steel, Metal, Glass >

□ Nature of Production Facilities

- The steel manufacturing industry uses a continuous process for the making of raw materials and products. Therefore, it is feared that the partial suspension of lines could result in great damage.
- Further, factories involving metal smelting, glass melting, etc. require continuous operation to maintain high internal temperature for 24 hours, 365 days.

□ Preparatory Measures for Continuous Operation

- (Alternative Human Resources) Develop a plan to secure alternative human resources and adjust shifts for each process
 - * (eg.) A process that allows the mobilization of alternative human resources maintains the existing working method through reallocation of shift teams.
 For processes that do not allow mobilization of alternative human resources, convert the shift system (eg. 4 teams, 3 shifts → 3 teams, 2 shifts).
- (Response System) Develop a Business Continuity Plan and emergency response system for each company.
- Establish a Task Force Team, Response Plan per scenario and Self-Quarantine Criteria according to the company's situation. Pursue preemptive response to prevent spread of COVID-19.
 - * (Eg) Establish a full-time Disease Control Team, implement measures for independent control of core facilities on a regular basis, distribute disinfectants for each department, and operate a counseling center related to COVID-19 and health within the company.
- (Protective Gear) Secure Level D personal protective gear^{*} that is to be worn by personnel during the disinfection process, and provide information and education to workers on how to wear protective equipment.
 - * (Protective Clothing) Chemical resistant protective clothing, sterile clothing, as well as goggles, dust-proof mask, gas mask, etc.

□ Plan for continuous operation of production facilities

• (Patient Quarantine) If a suspect/confirmed case occurs, he/she must immediately be

quarantined, and his/her team (close contacts), and if necessary, secondary contacts, must be directed to stay away from the workplace.

- (Continuous Operation) Disinfection of facilities, operation room and movement route of the confirmed case → All workers necessary for continuous operations up to 24 hours after disinfection must wear protective gear at work^{*}
 - * Ventilation by use of blower after quarantine

Target Facilities	Work Plan
Control Room	 Work simultaneously while the disinfection work is going on (Wear Level D personal protective gear)
Production Facilities (blast furnace, etc.)	 Disinfect and block access, and if necessary, wear Level D personal protective gear for access

< Guidelines for Petrochemicals >

□ Features of Production Facilities

- (Entry Restriction) Only workers with prior approval shall be allowed to enter^{*}, and the number of entrants is to be minimized.
 - * In addition, a fever check is to be made in the morning on workers that enter the business site. If body temperature is at least 37.5°C, or there are respiratory symptoms, the worker cannot enter the premises.
- (Facility Environment) Factory automation necessitates only a few persons^{*} to be at work. Further, the Control Room for each factory is separated for operation. For processing safety, suspension and resumption of operations shall not be done immediately (at least 3 days are necessary).

* For NCC facilities of the size of 99,000~165,000m², there are about ten workers (4 teams in 3 shifts that work 24 hours).

□ Preparatory Measures

- (Protective Gear) Each facility is to be fully prepared with protective clothing, goggles, gloves, galoshes, masks.
- (Alternative Human Resources) Upon the occurrence of a confirmed case, establish a plan to adjust shifts, and acquire additional human resources (currently there are 4 teams and 3 shifts).
- (Response System) Arrange for preventive activities (measure body temperature, restrict business trips, disinfect buildings and vehicles) and establish post-crisis measures (acquire alternative human resources, plan ordinary operation).

□ Plan for Continuous Operation of Production Facilities

- (Initial Response) Distribute protective gear and direct the infected person's team to stay away from work.
- [Protective Gear] Distribute protective clothing and electric respirators for workers' protection.

- [Self-Quarantine] Team with a confirmed case is directed to stay away from work, and close contacts are advised to self-quarantine.
- (Normal Operation) Disinfect the site, and arrange for a minimum number of persons dressed in protective clothing to work normally in the Control Room.
- [Access Restriction and Disinfection] Other than the minimum required number of persons, the area is to be prohibited from access. The entire interior and exterior shall be disinfected.
- [Working Simultaneously] The minimum required number of persons (about 3) wearing protective clothing shall work in the Control Room while it is being disinfected.
 - * After disinfection, protective gear shall be worn for at least 24 hours
- [Alternative Human Resources] Work shall be reallocated, with the quarantined team advised to stay away (convert to 3 teams, 2-3 shifts, with use of idle manpower).
 - * Existing human resources shall either be self-quarantined or continue work, depending on the measures the health authority advises after their initial withdrawal.

Reference 3

Government Assistance for Companies regarding COVID-19 and Information on Relevant Organizations

Economic Support: Check the MOEF Emergency Economy Meeting Webpage (wwww.moef.go.kr/2020/emgncEcnmyMtg.do)

Other Support: Check "Damage Assistance Policy" Bulletin, COVID-19 Webpage (ncov.mohw.go.kr)

Туре	Target	Description	Relevant Organization
Guartee	SMEs damaged by COVID-19, SMEs that manufacture products and provide services related to COVID-19	<special guarantee="" program=""> Provide support of KRW 905 bln. Expand the limit (other than the existing range of support, provide up to KRW 300 mln.) Increase guarantee ratio (85%→95%). Apply guarantee rate of 1.0%, and simplify the audit procedure. </special>	Korea Technology Finance Corporation 1544-1120
	SMEs damaged by COVID-19	 <preferential guarantee="" program=""></preferential> KRW 300 bln. Preferential guarantee support, increase guarantee ratio (85%→95%) Apply guarantee rate of 1.0%, simplify the audit procedure 	Korea Credit Guarantee Fund 1588-6565
Loan	SMEs damaged by COVID-19	Small and Medium Business Corporation (no code) 1357	
Local Tax	Companies experiencing difficulty due to shutdowns after occurrence of COVID-19 confirmed cases, and visits by quarantined cases and confirmed cases	 Report and extend the payment duration for acquisition tax, local income tax, resident's tax, employee classification (within 6 months, possible to re-extend by another 6 months) Extend the duration for collection and recovery of arrears, possible to re-extend for additional 6 months Defer tax investigation, reduce local tax 	Department of Local Tax Policy, Ministry of Interior and Safety 044-205-3809 * For details, inquire at the Tax Policy Office of the local municipality
Tariff	Import/export companies experiencing difficulty with supply of raw materials	 Extension of payment date, payment in installments (up to 1 year) Immediate tax refund, deferment of tax investigation Operate a Problem Solving Center 	Audit Policy Division, Korea Customs Service 042-481-7863 or (no code) 125
Oed Cad	Small and medium franchises that may be subject to damage	• For small and medium franchises (annual revenue of KRW 500 mln. or less) subject to damage, consider provision of marketing support such as interest-free installments, and lowering of lending interest rate for business funds.	SME Finance Department, Financial Services Commission 02-2100-2983
	Businesses that have implemented employment maintenance measures for 3 months from April 1-June 30, 2020 (business shutdown or employee leave), and paid the relevant allowance	<employment fund="" maintenance="" support=""> Implement employment maintenance measures, and provide assistance for labor costs that have actually been paid. * Application method: Employment Insurance webpage (www.ei.go.kr)→"Corporate Services" on top→ "Employment Stabilization Grant"→"Employment and Maintenance Support Fund" </employment>	Civil Affairs Center, Ministry of Labor and Employment (no code) 1350 or Employment Welfare Center governing the relevant business site, Corporate Support Department
Employment	Workers that have taken family care leave after Jan. 20, 2020	 <urgent care="" costs="" family="" for="" support=""></urgent> Support of KRW 50,000 per day, up to 5 days per person * Application method: Ministry of Employment and Labor webpage (www.moel.go.kr)→"Civil Affairs" on top→ search in "Applications" 	Civil Affairs Center, Ministry of Labor and Employment (no code) 1350
	Businesses that have provided paid leave to quarantined persons	<support costs="" for="" leave="" paid=""> Support for daily wages per individual (maximum KRW 130,000 per day) % Not to be paid in duplication with Living Expense Support </support>	Local Branch, National Pension Service 1355
	Companies that have used the flexible working system	<support costs="" flexible="" for="" indirect="" labor="" of="" the="" work<br="">System> • In the case of using the system 1-2 times a week, workers' per capita annual support of KRW 2.6 million in total • In the case of using the system at least 3 times a week, workers' per capita annual support of KRW 5.2 mln</support>	Local Employment Labor Center, governing relevant business site

< Report of and Inquiries Regarding Difficulties Related to COVID-19 >

Description of Inquiry	Relevant Organization, Contact Info
Reporting on difficulties SMEs experience regarding COVID-19, request for assistance and counseling	SME General Call Center (no code) 1357
Financial difficulties experienced by SMEs and middle market enterprises related to COVID-19	Financial Supervisory Service (no code) 1332
Reporting of difficulties experienced by middle market enterprises, request for assistance and counseling	Report Center for Middle Market Enterprises related to COVID-19 (FOMEK) 02-3275-1954, fomek119@fomek.or.kr * Check www.fomek.or.kr for description of assistance extended to middle market enterprises.
Difficulties in supply of raw materials and components	Response and Support Center for Supply of Raw Materials and Components 02-2100-1572
Companies that are doing business in China	KOTRA COVID-19 Emergency Response Team 1600-7119
Difficulties in exports, finance, funding assistance, cancellation and/or delay of export orders, logistical difficulties in import/export	KITA Support Center for Resolution of Export Difficulties 02-6000-5237

< List of Guidelines Regarding COVID-19 (as of March 2020) >

Name of Guideline	Relevant Organization (Contact Info)	Downloa	d Location	
Standard Plan for Business Continuity upon the Occurrence of an Infectious Disease (Version 2)	Department of Industrial Workplace Innovation, MOTIE, (044-203-4221)		MOTIE Webpage	
Guidelines to Respond to COVID-19 in the Case of Industries Operating 24 Hours	Department of Semiconductor and Display, MOTIE (044-203-4274)		(<u>www.motie.go.kr</u>) →Click on pop-up window	
Response Guidelines for Business Sites to Prevent Occurrence and Spread of COVID-19 (Version 7) * English and Chinese translations available	Department of Industrial Health. Ministry of Employment and Labor (044-202-7748)	Center for Disease Controls COVID-19 Webpage (ncov.mohw.go.kr)	MOEL Webpage (<u>www.moel.go.kr</u>) →News →Announcements	
Guidelines for Disinfecting Collective Facilities and Frequently Used Establishments Visited by COVID-19 Cases (Version 3)	Instudion Management Team, Central Quarantine Headquarters (043-719-9310)	→Collective Facilities and Frequently Used Establishments	CDC Webpage (<u>www.cdc.go.kr</u>) →Announcements, data	
Guidelines for Control of Group Events Related to COVID-19 (Version 2)	Central Accident Management Headquarters,		→Laws, guidelines, formats →Guidelines	
Response Guidelines for Managing Collective Facilities and Frequently Used Establishments to Contain Spread of COVID-19 (Version 3)	Center for Disease Control (044-202-3805)		-	
Guidelines for Intensive Management of Business Sites to Prevent COVID-19	hstuten Maragement Team, Central Quarantine Headquarters (044-202-2511)		-	
Guidelines to Prevent COVID-19 at Call Centers (Version 2)	Department of Industrial Health. Ministry of Employment	_	MOEL Webpage (<u>www.moel.go.kr</u>)	
Guidelines for Social Distancing (for business sites) Ministry of Employment and Labor (044-202-7748)			→News →Announcements	

* Social distancing has been extended to April 19, 2020.
COVID-19: We can fight and win.
Highly Intensive Social Distancing
For 15 days (March 22 - April 5, 2020),
please refrain from going out and stay at home as much as possible to prevent COVID-19.

<Guidelines for People to Stay Safe> Stay at home, and delay or cancel all non-essential get-togethers, group dinners, events, and trips.

Refrain from going out, other than for buying daily necessities, visiting medical agencies, and attending work.

Adhere to personal hygiene rules, such as washing hands and cough etiquette.

Do not go to work if you experience fever or respiratory symptoms (cough, throat pain), and take good rest at home.

Avoid physical contact such as shaking hands, and maintain a healthy distance of 2m.

Disinfect and ventilate your surrounding environment everyday.

<Guidelines for People at Work> Wash your hands thoroughly using soap and running water.

Do not visit frequently used establishments, such as dressing rooms and indoor lounges.

Do not sit face-to-face when eating, and maintain a certain distance.

Avoid physical contact such as shaking hands, and maintain a healthy distance of 2m.

Use personal items when you need to use cups and tableware.

Go straight home after work.



Business Continuity Plan in Response to Infectious Diseases

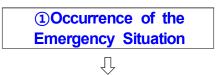
[Company Name]

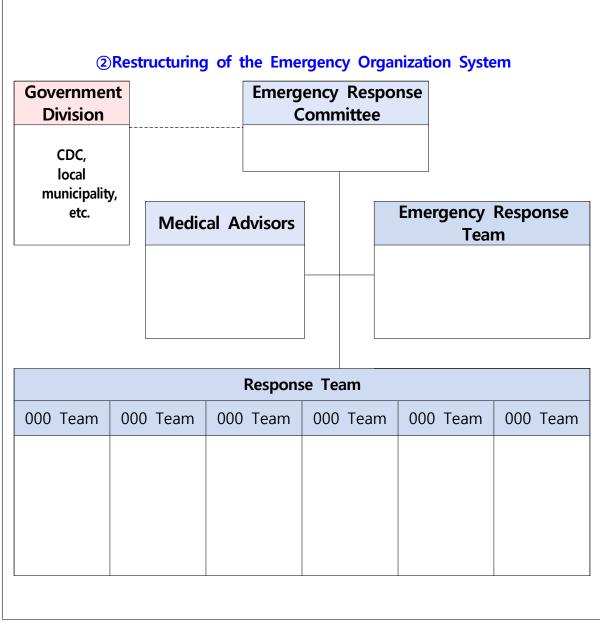
March 2020

[Form 1] Basic Company Information

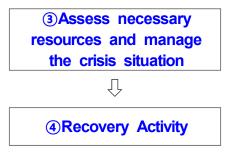
	Туре	Description				
1	Name of the Company	< > Co., Ltd.				
2	Address	Gyeongi-do, < >-si, < >				
3	Industry	lanufacturing (molds)				
4	(Annual) Sales	KRW 000,000 per year				
5	No. of Employees	00 persons				
6	Date of Establishment	< >				
7	Types of Major Customers (industry, etc.)	Automobile component manufacturing				
8	Major Facilities (machine/ equipment)	Molding machine, transport equipment, welding equipment				
9	Industry Characteristics	From molding design to manufacturing, supply is usually to automobile part manufacturers				

[Form 2] BCP Emergency Organization Chart (Example)









[Form 3] BCP Business Response System

	Position	Name	Major Responsibilities
	Committee Chairman	Ahn 00	General Manager
Emergency Response Committee			Production Manager
-			Raw Materials Manager
Medical Advisory Team			Medical Advise Support
			Deliver Emergency Response Instructions
Emergency Response Team			Obtain Contact Info for Government Organizations and Relevant Organizations
·cum			Deploy a Reporting System
			Manage Customers and Branches
Operations Management			Monitor the Operating Funds and Expenses
Team			Adopt and Operate a Remote Working System
			Manage Hygiene and Disinfectants
			Manage Business Partners
Logistical Management Team			
			Collection of Information
Information			Build a DB of Technical Manpower
Management Team			Manage Health Info of Workers
			Backup Major Info, Manage Storage
Recovery Support			Support Alternative Human Resources and Technology
Team			Manage Recovery of Absent Employees
			Monitor Trends of Case Occurrence
Industrial Health Team			Manage Infections among Employees and Customers
			Prepare and Distribute Press Releases
Promotion Team			Prepare and Present Briefing

[Form 4] Individual Responsibility Management Card

Name/Organization	<kim 0=""> / Logistics Management Team</kim>
Emergency Contact	010-0000-0000 (Emergency Family Contact: 010-0000-0000)
Action Principle	 Report the health information and absence situation Transfer roles to substitute upon absence (Manager Song 00 of Logistical Management Team) Work every other day from < >-< > (Team A), must adhere to guidelines on working every other day
Responsibility	 Manage the inventory for hygiene/disinfectant products Assess the demand for hygiene/disinfectant products and purchase accordingly Position hygiene/disinfectant products for use in the organization
Response Measures per Crisis Stage	• • •
Work Report	 Reporting System: Team Leader, Kim OO Description of Report. Health information and whether the worker has come to work, emergency contact network, work substitutes, special considerations regarding relevant responsibility
Notes	

[Form 5] Core Businesses Specifications

	Туре			Description		
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
1	Type of Product and Service (Business)	Part A for Supply Purposes				
2	Share in Revenue (%)	00%	00%	00%	00%	00%
3	Rationale for Determining Priorities	Priorities are determined based not only on share in revenue, but the essential processes until the final good is produced				
4	Scope of Target Business	Integrate the preliminary product with components	Design and preliminary processing of raw materials			

[Form 6] Classification of Core Businesses Functions

• Name of the Core Business: *Part A for Supply Purposes* * *Prepare for each core business as recorded in [Form 5]*

Name of Operation: <i>Molding</i>	Name of Operation: Supply	Name of Operation:	Name of Operation:	Name of Operation:
Description of Operations	Description of Operations	Description of Operations	Description of Operations	Description of Operations
Import of raw materials and subsidiary materials; storage, drying	Confirm the finished goods, buyer (contract), inventory, supply (transport)			
Can managers in charge of core operations be substituted? (alternative human resources)	Can managers in charge of core operations be substituted? (alternative human resources)	Can managers in charge of core operations be substituted? (alternative human resources)	Can managers in charge of core operations be substituted? (alternative human resources)	Can managers in charge of core operations be substituted? (alternative human resources)
Kim 00	Kahng oo			
Not possible	Possible (Lee 00)			
Major Management Resources Crucial for Operations	Major Management Resources Crucial for Operations	Major Management Resources Crucial for Operations	Major Management Resources Crucial for Operations	Major Management Resources Crucial for Operations
Raw materials, elevators, conveyor belt, molding press, 6 experienced employees	Logistical warehouse, transport equipment, contract management system (electronic network), 1-2 employees			

					Descript	ion		
Туре		Related operations	Cause for absence	Absent period	Remote work possible?	Substitution possible? *Substitute:	Paid/ Non-paid	Emergency Contact
	Kim 00	Production of Part A	Confirmed Case (infected)	14 days	x	X	Paid	010-0000-0000
	Koh 00	Employee Management	Care for children at home	7 days	0	O * Yoon 00	Paid	010-0000-0000
A								
b s e n t								
e								
a	otal no. of absentees (as of < >)	00 number	of persons					

[Form 7] Alternative Work Plan

[Form 8] Management Resource Checklist for Each Function

Resources		Evaluation		Status			Supply Plan		
		Grade (High/ Medium/ Low)	Required Amount	Reserve Amount	Confirmed Date	Expected Point of Exhaustion	Expected Point of Additional Supply	Means of Transportation	
								Ordinary	Emergency
	Metal Powder	High	00kg	00kg	May 1, 2020	May 14, 2020	May 16, 2020		
Raw Materials									
	Molding Machine	High	3 units	3 units	-	-	-	-	-
Machinery and Equipment	Forklift Truck	Medium	1 unit	1 unit	-	-	-	-	-

[Form 9] Status of Available Funds and Subscribed Insurances

Description		Amount	Remarks			
Available Budget	Cash/Deposit	KRW 000,000	o o Bank			
Budget that can be Procured	Government Support	KRW 00,000	Employment Maintenance Support Fund			
Subtotal						

<Fund Situation>

<Insurance Description>

Insurer	Policy Period	Compensation (O/X)	Scope of Guarantee	Guarantee Linit Amourt (KRW)	Contact Info of the Insurer
<i>o olnsuranc</i> e Co.	00.00.'18~00.00.'21	0	Individual infection confirmed case		
$\triangle \Delta$ Insurance Co.	00.00.18~00.00.21	0	Data related to transportation		

[Form 10] Status on Management of Hygiene Products

Туре	Stockpiled Amount	Confirmed Date	Expected Point of Exhaustion	Expected Point of Additional Supply	Remarks
Hand disinfectant					
Disinfectants for cleaning purposes					
Single-use masks					
Single-Use gloves					
Tissue					
Thermometer					

[Form 11] Employee Contact Network and Health Status Check

Dept	Name	Position	Responsibility	Company No.	Mobile No.	Mail	Emergency Contact (Family, etc.)	Health Situation	Notes
Logistical	Kim00	Team Leader	Check raw materials quantity	02-111-1111	010-111-1111		Spouse Lee00 010-2222-3333	Satisfactory	
Logistical Team	Nah00	Assistant Manager							

[Form 12] Management of Personnel Within/Outside of the Company

Туре	Company/ Institution	Personnel	Contact Info	Mobile No.	Mail	Notes
	Supplier A	Park 00	044-202-0000	010-0000-0000		Notify whether the date of supply has been met
Customer						
Business Partner	Raw materials importer B	Kim 00	044-202-0000	010-0000-0000		Check the status of confirmed cases at Company B and confirm supply schedule
Dusiness Pariner						
Repair and Maintenance						
Logistics						
Data Management						
Financial						
Institutions						
Government						
Agency						
Other						

[Form 13] Collection of Information Regarding Infectious Diseases

		Webpage	Key Contact	Remarks
	CDC	ncov.mohw.go.kr	1339	Government guidelines and information on each status update
Govern ment	Local government			
	Local health center			
	Association/ Union			
Other	KOTRA		COMD-19 Emegency Response Team 1600-7119	Reporting of difficulties faced by companies doing business in China
	KBiz		SME General Call Center 1357	Reporting of difficulties faced by SMEs

[Form 14] Communication Within/Outside of the Organization

X Communication targets include laborers from business partners, laborers dispatched from service companies (reserve personnel), delivery personnel, specially employed personnel

	Target	Employees, business partners, local community, government institutions
Pro motion	Description	Behavioral rules, such as principles of personal hygiene management, washing hands, etc.
	Method	Online, mobile phone, broadcasting, brochures
	Target	Employees, dispatched service workers (reserve personnel), specially employed personnel
Education	Description	Self management guidelines, response method upon coming into contact with a confirmed case
	Method	Distribution of on/offline materials, intra-office broadcast, mail
	Target	Laborers of business partners, dispatched service workers (reserve personnel), delivery personnel, specially employed personnel
Communi cation	Description	Trends in spread of infectious disease within the organization, prevention of false rumors
	Method	Announcement of confirmed cases by text or mail Measures such as disinfection and installation of intra-office heat detector, etc. shall be announced at the corridor or elevator Relevant government guidelines to be posted on the intra-office bulletin board or webpage

[Form 15] Emergency Fund Lending Plan

• Recovery Costs

	Amount of recovered cost	Remarks
Machinery/Equipment/Facilities		
IT/Data		
Telecommunications		
Key industries (electricity, waterworks, etc.)		
Other		
 Subtotal (A) 		

\circ Loss during period of work suspension

	Amount	Remarks
②Loss of products/ raw materials		
Revenue (target-expected)		
Revenue Total profit (target-expected)		
Sales and administrative costs (target-expected)		
③Operating profits (target-expected)		
④Subtotal (B)		2+3

○ Status of funds held

	Amount	Remarks
Cash/deposits		
Non-life insurance		
Government support		
Subtotal (C)		

○ (Essential) Fund procurement

	Amount	Remarks
(1+4)		Loans in the case of a deficit

• Review of fund procurement sources

	Amount	Remarks
Special guarantee by the government (Credit Guarantee Fund)	KRW 00 mln	Period, interest rate, etc.
Total funds procured		

[Form 16] Form for Responding upon the Occurrence of a Confirmed/ Suspect Case

	Name of Business Site		
Quarantined Area	Suspect case: 1st floor, Conf. Room. A Contact: 1st floor, Conf. Room. B (not to be used for purposes other than quarantine)		
Manager	Choi 00, Park 00		
Method of Reporting	<i>CDC 1339 Local health center 000-0000</i>		

Map of location of the quarantined area

<List of Contacts>

		Preparer:	Date of in	vestigation:	
No.	Name	Resident's Number	Contact No.	Address	SuspectConfined case that was contacted
1					
2					
3					
4					

* Measures of Coping Upon Occurrence of Suspect/Confirmed Cases

	(Notify) If an employee or visitor shows symptoms of an infectious disease, immediately notify the intra-company manager in charge of infectious diseases (Emergency Response Team, Industrial Health Team) by telephone.
Suspec t Cases	(Report) When a suspect case is identified on the business site, check for symptoms and instruct the person to wear a mask. Immediately report to the health center or CDC call center at 1339.
	(Quarantine) The suspect case or their contacts shall not move until they receive an inspection by the health center and an epidemiological survey is conducted. He/she shall wear personal protective gear (mask, single-use gloves, etc.) and remain in an isolated area within the business site, and wait for the health center personnel to arrive.
	(Disinfection) After transferring the suspect case to the health center, the person in charge shall wear personal protective gear (mask, single-use gloves, etc.), and use disinfectants such as alcohol and rox to disinfect the quarantine area where the patient was waiting.
	(Authority report) Persons the health authority selected as subject to self-quarantine shall not go to work, and shall report by phone to the manager. He/she shall stay in a hospital or remain in self-quarantine according to the health authority's instructions.
	(Work adjustment) Alternative work schemes are to be planned and adjusted during the period of absences.
	(Announcement) When a confirmed case has been detected at work, this information shall be immediately announced to all workers at the business site.
Confir med	(This includes workers that are employed by business partners, dispatched by third parties, or members of service companies, etc. working together at the business site)
Cases	(Assess contacts) Persons that have contacted the infected person (having come within 1m face-to-face with the patient for conversation) shall be assessed, and included in a list, to be managed and, if necessary, reported to the health authority.

[Form 17] Plan to Disinfect and Close Business Site upon the Occurrence of a Confirmed Case

	Type Description							
	Infected	•						
Confirmed	persons	Cho 00, Kahng 00, 2 persons						
Case	Department, Location	Call Center (Bldg. 2, 4th flr, No. 000)						
Movement Route of the Confirmed Cases	Confirmed Case A Cho00	8:30 Went to work by one's car (southern parking site → lobby → elevator no.0) 8:50 Intra-office cafe 9:00~11:45 Worked at Call Center seat no. 00 11:50~12:30 Intra-office cafeteria 12:30~13:00 Intra-office cafe 13:00~14:00 Worked at Call Center seat no. 00 14:00 Symptoms manifested, moved to the quarantine area						
04363	Confirmed Case B Kahng00	7:50~8:40 Went to work by shuttle bus (Nowon~Gwacheon section, Bus no. 00) 8:45 Checked for fever with fever detector in the lobby, and moved to the quarantine area						
	Scope of Disinfection	Movement route, restroom, public facilities, publicly used areas						
	Type of Disinfectant							
	Disinfectant							
Disinfaction	Acquired Quantity							
Disinfection	Ventilating Period (Duration of Business Siles Closure)							
	Method for Processing Wastes alter Disinfection							
	Coqueste Agency in Chage	Regional Health Center						
	Scope of Closure							
Closure	Period of Closure							

<Rules for Safe Use of Disinfectants>

- Use after careful reading of the manual
- · Do not mix with or use in conjunction with other disinfectants
- When diluting the disinfectant, adhere to rules regarding the dilution ratio
- · Wear protective gear such as a face mask during use
- When a person has been excessively exposed to the disinfectant, immediately wash the exposed area with water
- Take measures to prevent environmental pollution due to the use of disinfectants

[Form 18] Inspection of the Business Site

	Туре	Description
	Minimize contact among employees	Work every other day (3 teams, shifts in units of 3 days)
Business Site	Manage outside persons	Record in a guest book when entering/leaving premises, and record entry/exit time and name and contact information of the visitor Pass through heat detector, disinfect hands
	Manage business trips	Limit to essential businesses, robtain confirmation from the team leader or higher
	Disinfection	
	Manage the list of entrants/exiters	
Entry/ Exit	Body temperature measurement device	
	Order of food distribution	
Restau rant	Seat location	
Promo	Description using a bulletin	
tion	Location of the bulletin	
Other		

< Tips for Managing the Business Site >

Minimize unnecessary contact

- * Upon the occurrence of an infectious disease, it is important to reduce interpersonal contact as much as possible, in order to minimize the risk of the infectious disease spreading among employees
- Recommend teleconferences (use of telephone, video conference, Internet), working from home, flexible work hours, shifts
- Minimize business trips, conferences, workshops, in-person training
- Prohibit get-togethers in lounges or other social spaces
- When face-to-face meetings are inevitable, try to opt for a large conference room (where at least 1m distance can be maintained between people). Refrain from shaking hands or hugging, conduct meetings in an open space if possible, and reduce the duration of meeting.
- Advise employees to refrain from holding/attending social events involving leisure or religion in which there is risk of contact with an infected person
- If a high frequency of contact with others is inevitable, such as in the case of customer service representatives or drivers of vehicles of mass transportation, install protective glass shields
- In the case of business sites, or closed spaces with a high concentration of people, such as call centers, install a wall or shield, implement shifts to minimize the number of people working at the same time, and take other necessary measures

Promote practice of hygiene among employees and visitors

- Attach information posters on the entries/exits, shower rooms, sinks, and public places of all business sites
- Make use of brochures, newsletters, email, employee bulletin boards, wage payment statement, etc. and promote the importance of hand hygiene and maintenance of clean surroundings during the outbreak of an infectious disease.

[Form 19] Classification of Duties of the Recovery Team

Target recovery time	E. g. 3 days
Target recovery level	E. g. 80%

Operations	Description	Manager	Contact
Announce trends			
Check contract			
Establish the future supply plan			
Adjust alternative production of other companies			
Check status of employees			
Share damage situation			
Assess deficient items			
Provide for alternative means of transportation			
Check damage situation			
Recover from damage			
Assess necessary funds			
Provide for funding means			
	Announce trendsIAnnounce trendsICheck contractIEstablish the future supply planIAdjust alternative production of other companiesICheck status of employeesICheck status of employeesIShare damage situationIProvide for alternative means of transportationICheck damage situationICheck damage situationIAssess necessary fundsI	Announce trendsCheck contractEstablish the future supply planAdjust alternative production of other companiesCheck status of employeesShare damage situationProvide for alternative means of transportationCheck damage situationCheck damage situationRecover from damageAssess necessary funds	Announce trendsImage: contractCheck contractImage: contractEstablish the fulue supply planImage: contractAdjust alternative production of other companiesImage: contractCheck status of employeesImage: contractShare damage situationImage: contractProvide for alternative means of transportationImage: contractCheck damage situationImage: contractAssess necessary fundsImage: contractAssess necessary fundsImage: contractImage: contrac

[Form 20] Recovery Activities

Customer support Business partner support	Announce trends Assess contracts Establish a future supply plan Adjust alternative production of other companies Check status of employees			
Support Business partner support	Establish a future supply plan Adjust alternative production of other companies			
partner support	Adjust alternative production of other companies			
partner support	of other companies			
Employee	Check status of employees			
Employee				
response	Share the damage situation			
	Assess deficient items			
Raw materials response	Provide for alternative means of transportation			
	Check the damage situation			
Facility response	Recover from damage			
	Assess necessary funds			
Fiscal support	Provide for funding means			
	Raw materials response Facility response	Raw materials response Assess deficient items Provide for alternative means of transportation Facility response Facility response Check the damage situation Recover from damage Assess necessary funds Fiscal	Raw Assess deficient items Materials Provide for alternative means of transportation Facility Check the damage situation Recover from damage Assess necessary funds Fiscal Provide for funding means	Raw materials response Assess deficient items Provide for alternative means of transportation Image: Check the damage situation Facility response Check the damage situation Recover from damage Image: Check the damage situation Fiscal Assess necessary funds Fiscal Provide for funding means

[Remarks]

[Form 21] Assessment of Impact and Setting of Recovery Time Objectives

• Name of core business: Part A for supply purposes

* Record for each core business as described in [Form 5]

Name of Operations	Period of business suspension	Financial impact	Impact on the buyer	Maximum tolerable period of disruption (MTPD)	Recovery time objective	Priority
	Less than 1 day	Large/medi um/small/ none	Large/medi um/small/ none	-		
	1-3 days					
Molding	4-7 days			eg: 1 week	5 days	1
	8 days - 1 month					
	2 months - 3 months					
	4 months -					
	Less than 1 day					
	1-3 days					
Supply	4-7 days					
Cuppiy	8 days - 1 months					
	2 months - 3 months					
	4 months -					
	Less than 1 day					
	1-3 days					
	4-7 days					
	8 days - 1 months					
	2 months - 3 months					
	4 months -					

[Form 22] Record damage per core operation, assess damage and provide for countermeasures

• Operations for assessment: Molding part A for supply purposes

* (Eg: MTPD is at least one week)

		Time							Has a response
Management Resources		required for	1 day - 3 days - 7 day		-7 days	- 1 - 3 More			plan been
		recovery	1 ddy	- C up	/ ugo	month months		more	established?
Human Resourc es	Return of technical manpower	Immediate							-
		Immediate							-
		3 days							-
		2 days							-
									-
Machine ry and									-
Equipm ent									-
									-
									-
IT and									-
Data									-
									-
									-
Teleco mmunic									-
ations									-
									-
	Raw material A	2 weeks							Discussing alternative income through Company 00
Outsour cing/	Raw material B	3 days							-
supply	Raw material C	3 months							Need to provide for a response plan
									-
									-
Infrastru cture/									-
other									-
									-

MTPD

[Form 23] Employee Recovery Plan

Persons planning to return	Department	Immediate return possible?	Expected date of return	Other
Kim 00	Poolut Development Team	Possible	0000	Full recovery from infectious disease
Seo 00	Logistical Team	Not possible	0000	Needs to take care of family, leave of absence