

## **Business Continuity Plan (BCP)**

### **1) Introduction**

Various crises in the company's operations, whether caused by employees' actions or natural disasters such as fire, floods, earthquakes, or malicious actions against the company, including protests, riots, or severe pandemics like the Coronavirus Disease (Covid-19), significantly impact employees and operations at Siamgas and Petrochemicals Public Company Limited.

Siamgas and Petrochemicals Public Company Limited operates headquarters, branch depots, filling plants, and service stations nationwide, employing a large number of staff at managerial and operational levels. Without a structured contingency plan to ensure business continuity during crises affecting the company's core mission, operational disruption might occur. Developing a Business Continuity Plan (BCP) is crucial to enable the company to handle unexpected emergencies effectively, ensuring critical business processes remain operational as intended, thus mitigating the severity of impacts on the organization.

To ensure the company's various units can continue performing "critical operations" systematically and efficiently, Siamgas and Petrochemicals Public Company Limited has established a Business Continuity Plan (BCP). This plan aims to prepare the company for and respond to crises affecting its operations.

### **2) Objectives, Assumptions, and Scope**

#### **2.1 Objectives**

1. Provide guidance for branch depots, filling plants, and service stations to manage business continuity effectively.
2. Prepare these facilities to respond to crises and minimize impacts from operational or service interruptions.
3. Mitigate the damages caused by operational disruptions to an acceptable level.
4. Maintain stakeholders' confidence in the company's resilience, even in crises that disrupt operations.

#### **2.2 Assumptions**

1. Emergency events will not impact the alternative operation sites prepared by Siamgas and Petrochemicals Public Company Limited.
2. IT systems are backed up, and these backups are not affected by emergencies as the main systems might be.

3. "Personnel" refers to all staff and employees of Siamgas and Petrochemicals Public Company Limited.

## **2.3 Scope**

This BCP covers situations involving crises or emergencies at branch depots, filling plants, and service stations, including:

1. Fires Incident
2. Chemical spills Incident
3. Floods Incident
4. Protests or riots Incident
5. Severe pandemics Incident

## **Analysis of Key Resources**

Crises or emergency situations can take many forms. To ensure that Siamgas and Petrochemicals Public Company Limited can manage its operations seamlessly, it is essential to identify and secure key resources. These resources must be detailed in the Business Continuity Plan (BCP). The preparation of key resources considers impacts in the following five areas:

### **1. Impact on Facilities / Primary Work Locations**

This refers to crises or emergencies that cause damage to primary work locations or render them unusable, preventing personnel from accessing the site temporarily or long-term. This also includes customers being unable to access key service locations.

### **2. Impact on Essential Equipment/Procurement and Supply**

This involves crises or emergencies that render critical equipment unusable or hinder the procurement and delivery of such equipment.

### **3. Impact on Information Technology and Critical Data**

This includes crises or emergencies that disrupt IT systems, information technology workflows, or critical data, preventing their normal use in operations.

### **4. Impact on Personnel**

This refers to crises or emergencies that prevent personnel from performing their duties as usual.

### **5. Impact on Key Networks/Partnerships**

This encompasses crises or emergencies that disrupt communication or service delivery by networks, vendors, or other stakeholders, hindering the provision or delivery of goods and services.

By analyzing the potential impacts of crises or emergencies on each of these areas, the company can determine the critical resources required to maintain operations. These impacts are summarized in Table 1.

**Table 1: Summary of Crisis Events and Their Impacts**

Crisis/ Emergency Event	Impact on				
	Facilities/ Primary Work Locations	Essential Equipment and Procurement/ Delivery	IT Systems and Critical Data	Personnel	Networks/ Providers/ Stakeholders
1. Fire Incident	✓	✓	✓	✓	✓
2. Chemical Spill Incident	✓	✓	✓	✓	✓
3. Flood Incident	✓	✓	-	✓	✓
4. Protest / Riot Incident	✓	-	-	✓	✓
5. Pandemic Incident	✓	✓	-	✓	✓

### 3) Stakeholders in the Business Continuity Plan

#### 3.1 Structure and Teams

The management of business continuity during a crisis is an organizational system involving planning, development, implementation, testing, monitoring, and review. This ensures that the Business Continuity Plan (BCP) is current and actionable during situations that disrupt operations.

The crisis management system comprises the following components:

- 1) Establishing a clear crisis management policy by the executive team
- 2) Assigning specific roles and responsibilities to personnel.
- 3) Conducting tests and drills to ensure understanding and readiness for plan implementation.
- 4) Regularly reviewing and updating the plan to keep it relevant.

To define the roles and responsibilities of personnel involved, from executives to staff at various levels, a Business Continuity Plan (BCP) Team must be established. Consequently, Siam Gas and Petrochemical Public Company Limited has structured a crisis management system to ensure the effective and efficient implementation of the BCP.

The BCP team consists of Crisis Management Executive Committee and Operational Crisis Management Team. These teams must collaborate to monitor, execute tasks, and recover from emergencies within their respective areas to restore operations to normal as quickly as possible. The roles and responsibilities of each team member are detailed in Table 2.

**Table 2: List of Personnel and Roles in the Business Continuity Plan Team (BCP Team)**

Key Personnel		Role	Backup Personnel	
Position	Telephone Number		Position	Telephone Number
Deputy Operations Manager	02-120-9999 ext. 3344	Head of Business Continuity Plan Team	Assistant Operations Manager	02-120-9999 ext. 3322
Assistant Operations Manager	02-120-9999 ext. 3345	Operations Section Member of BCP Team	Senior Operations Officer	02-120-9999 ext. 3309
Safety Coordinator (1)	02-120-9999 ext. 3440	Safety Section Member of BCP Team	Safety Coordinator (2)	02-120-9999 ext. 3441

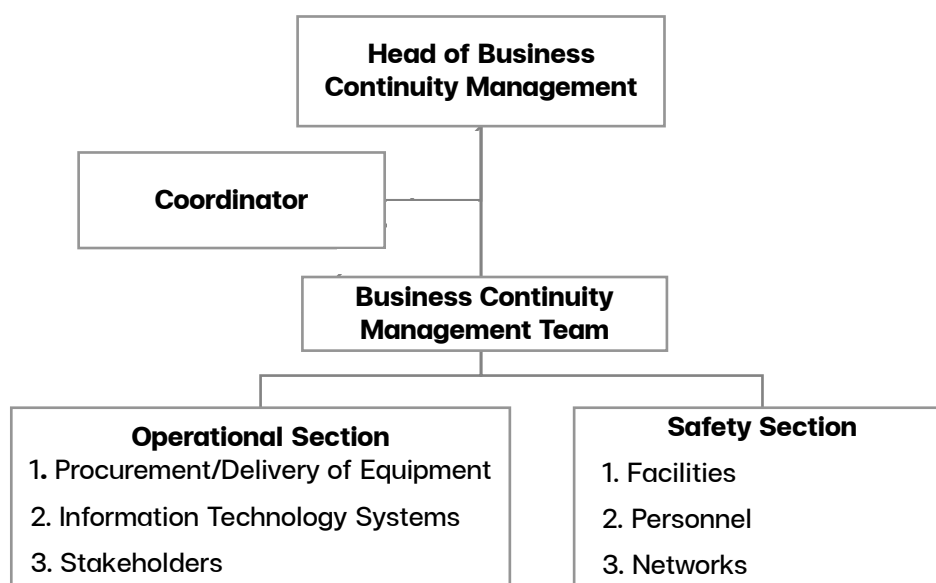


Figure 1: Diagram of the Structure and Team for Business Continuity Management

### 3.2 Business Continuity Strategy

The business continuity management strategy serves as a guideline for procuring and managing resources to ensure readiness during operational crises. It considers resources across five key areas, as detailed in Table 3.

**Table 3: Strategies for Business Continuity Management**

Resources	Business Continuity Management Strategies
1. Backup Work Locations	<p>1. Designate backup operational areas within Siamgas and Petrochemicals Public Company Limited facilities as follows:</p> <ul style="list-style-type: none"> <li>● Bangkok/Central: Siam Suksawat Terminal</li> <li>● Northern Region: Nakhon Sawan Terminal</li> <li>● Eastern Region: Bangpakong Terminal</li> <li>● Northeastern Region: Khon Kaen Terminal</li> <li>● Upper Southern Region: Surat Thani Terminal</li> <li>● Lower Southern Region: Songkhla Terminal</li> </ul> <p>If needed, evaluate and prepare alternative suitable locations in advance.</p> <p>2. Allow work-from-home arrangements for tasks unaffected by crises or tasks suitable for remote work, supported by IT systems such as MS Teams, Zoom, and Google Meet.</p> <p>3. Use electronic and online communication systems for intra- and inter-department coordination, such as MS Teams, Zoom, and Google Meet.</p> <p>4. Publicize information and updates to customers and external entities via online communication channels.</p> <p>5. Develop e-service systems to allow customers to connect with terminals, filling plants, and service stations even during crises.</p>

Resources	Business Continuity Management Strategies
2. Critical Equipment	1. Prepare laptops and network devices in advance, with IT ensuring prompt access and support during crises. 2. Acquire suitable backup computers or devices for internet connectivity. If unavailable, coordinate with IT for immediate procurement. 3. Permit employees to use personal computers if company-provided devices are unavailable. 4. Maintain printers, scanners, and fax machines with necessary network equipment for emergency use. 5. Allocate vehicles for essential travel, storing them at backup locations or other suitable places. 6. Ensure essential devices such as UPS units, backup power generators, data backups, and recovery systems are ready. 7. Provide essential storage devices like external hard drives and thumb drives 8. Maintain an appropriate stockpile of consumables.
3. IT and Key Data	1. Prepare critical data on cloud or shared drives for seamless access. 2. Back up important non-networked data at designated locations. 3. Record manual entries during crises and update IT systems once resolved
4. Personnel	1. Utilize designated backup staff to replace unavailable personnel within the same department or team. 2. Deploy personnel from outside the department or team if shortages occur.
5. Key Stakeholders	1. Secure mobile internet systems to connect to critical company information systems in case primary providers fail. 2. Coordinate with power authorities to enhance capacity or arrange backup generators for continuity during power outages.

### 3.3 Operation Impact Analysis

#### 1) Operation impact analysis

from the analysis, critical processes requiring immediate attention and recovery within a specified time frame are outlined in Table 4 below:

**Table 4: Operation impact analysis**

Key Processes	Urgency Level	Target Recovery Time				
		4 Hours	1 Day	1 Week	2 Weeks	1 Month
Gas receipt and dispatch services for Siamgas and Petrochemicals	High					
Procurement of liquefied petroleum gas	High		✓			
Installation and maintenance Financial and accounting operations Debt collection IT operations	Moderate			✓		
Human resource management General administration and business operations	Moderate				✓	
Policy and budget planning	Low				✓	

- 2) In managing business continuity during crises or emergencies that disrupt the operations of Siamgas and Petrochemicals Public Company Limited, or when operations cannot proceed seamlessly, it is essential to ensure that critical processes can continue systematically and efficiently. To achieve this, the Business Continuity Team has analyzed the minimum required resources necessary for sustaining operations during crisis conditions for each critical process as outlined below

## 2.1) Working Space Requirement in Table 5 below:

**Table 5: Working Space Allocation**

Resource	Source	4 Hours	1 Day	1 Week	2 Weeks	1 Month
Backup operational	Per Table 3, Item 1.1	30 sq.m. (5 People)	40 sq.m. (10 People)	60 sq.m. (15 People)	80 sq.m. (25 People)	80 sq.m. (25 People)
Work from Home		30 sq.m. (20 People)	30 sq.m. (15 People)	20 sq.m. (10 People)	-	-
Workspace for New Operational Locations in Case of Necessity						
Total Personal		25	25	25	25	25

Note: Access to perform duties is ensured within the specified time frame.

## 2.2) Equipment & Supplies Requirement in Table 6 below:

**Table 6: Equipment Allocation**

Personal	Source	4 Hours	1 Day	1 Week	2 Weeks	1 Month
Backup laptops (e.g., notebooks)	Purchase or external lease agreement	5	5	5	5	5
Printers compatible with laptops	Purchase agreement	1	1	1	2	2
Telephone/Fax/Scanner with network access	Purchase agreement	1	1	1	1	1
External network connectors	External lease agreement	1	1	1	1	1
Photocopiers	Rental from external companies	1	1	1	1	1

## 2.3) IT and Data Requirements

Siamgas and Petrochemicals Public Company Limited must develop external backup systems to ensure data accessibility during crises in Table 7 below:



**Table 7: IT and Data Requirements**

Resource	Source	4 Hours	1 Day	1 Week	2 Weeks	1 Month
E-Mail / Line Online Chanel	IT backup system	✓				
Automated order system	Sales and marketing departments	✓				
Gas receipt and dispatch documents	Operations		✓			
Financial documents (e.g., invoices, receipts)	Suppliers and partners		✓			

2.4) Personnel Requirement in Table 8 below:

**Table 8: Personnel Allocation**

Personnel	4 Hours	1 Day	1 Week	2 Weeks	1 Month
Office or backup workspace	5	10	15	25	25
Work from home	20	15	10		
Total	25	25	25	25	25

2.5) Service Requirement in Table 9 below:

**Table 9: Service Provider Requirements**

Resource	4 Hours	1 Day	1 Week	2 Weeks	1 Month
Internet service providers True (Telephone Number: 1242) Dtac (Telephone Number: 1678) AIS (Telephone Number: 1175)	✓				
Metropolitan Electricity Authority (Telephone Number: 1130) Provincial Electricity Authority (Telephone Number: 1129) Nam Sang Machinery Co., Ltd (Telephone Number: 02 708 5991)	✓				
Metropolitan Waterworks Authority (Telephone Number: 1125) Provincial Waterworks Authority (Telephone Number: 1662)	✓				

### 3.3 Steps for Business Continuity Management and Process Recovery

#### 1) Day 1 (Within 24 Hours): Immediate Incident Response

For all operations, personnel must prioritize their safety and the safety of others, strictly adhering to emergency response plans and procedures outlined by their department and the Disaster Prevention and Mitigation Department.

Steps and Activities	Responsible Role	Completion
<b>1. Notify personnel within the company/branches,</b> filling plants, and service stations about the emergency.	Business Continuity Team Leader	
<b>2. Convene the Business Continuity Team</b> to assess damages, operational impacts, service disruptions, and resource requirements for continuity. <b>3. Review urgent processes or high-impact</b> operations that must proceed using manual processing.	Operations / Safety Team	
<b>4. Identify and summarize</b> a list of injured or deceased personnel within the affected units.	Safety Team/Branch Managers	
<b>5. Report the situation to the Business Continuity Team Leader, including:</b> 5.1 List of injured/deceased personnel 5.2 Damage assessment and operational impact analysis 5.3 Essential resources required 5.4 Critical processes requiring immediate manual handling	Safety Team/Branch Managers	
<b>6. Communicate</b> updates to all relevant personnel following approvals from the Business Continuity Team.	Business Continuity Team Leader	
<b>7. Evaluate critical processes</b> requiring completion within 1-5 days.	Business Continuity Team Leader	
<b>8. Assess resource availability and team capacity</b> to address critical needs under crisis constraints.	Business Continuity Team Leader	
<b>9. Report Progress and Obtain Approval</b> Provide progress updates to the Business Continuity Team Leader of Siamgas and Petrochemicals Public	Operations Team	

Steps and Activities	Responsible Role	Completion
Company Limited. Include requests for approval to carry out urgent and high-impact tasks using manual processing when necessary.		
<b>10. Coordinate with Relevant Departments for Resource Procurement</b> Work with associated units to secure essential resources for continuity management, including: 10.1 Backup operational locations 10.2 Critical equipment and supplies 10.3 Information technology systems and key data. 10.4 Key personnel 10.5 Contractors, service providers, and stakeholders	Operations/Safety Teams	
<b>11. Execute Manual Processing for Urgent Tasks</b> Evaluate and execute manual processes only for urgent and high-impact tasks that cannot be delayed, ensuring all actions receive prior approval.	Business Continuity Team Leader	
<b>12. Identify Critical Partners and Notify Emergency Guidelines</b> Specify key partners, branches, filling plants, and service stations required for urgent services. Communicate continuity guidelines in line with the Business Continuity Team's recommendations.	Business Continuity Team Leader	
<b>13. Maintain Logs and Review Activities</b> Consistently record all activities, decisions, and tasks in a logbook, specifying details such as responsible individuals and completion times. Conduct regular reviews of all actions.	Business Continuity Team	
<b>14. Summarize and Communicate Plans for the Next Day</b> Prepare and share a summary of the current situation and plans for the next day with key personnel, including information about schedules, locations, and any necessary operational adjustments.	Business Continuity Team	
<b>15. Provide consistent updates</b> to the Business Continuity Team Leader as per defined schedules.	Business Continuity Team	

## 2) Days 2-7: Short-Term Response

Continue prioritizing safety and adhering to established protocols.

Steps and Activities	Responsible Role	Completion
<b>1. Monitor Recovery Progress</b> Track the recovery status of affected resources, assess their necessity, and estimate the time required for full restoration.	Business Continuity Team Leader	
<b>2. Verify Resource Availability</b> Coordinate with relevant departments to evaluate the readiness and limitations in securing necessary resources for crisis continuity, including: 2.1 Backup operational locations 2.2 Critical equipment and supplies 2.3 Key information technology systems and data 2.4 Essential personnel 2.5 Contractors, service providers, and stakeholders	Business Continuity Team Leader	
<b>3. Report to Business Continuity Team Leader</b> Submit a report to the Business Continuity Team Leader detailing resource availability, constraints, and recommendations for procuring necessary resources for continuity management.	Business Continuity Team Leader	
<b>4. Coordinate and Procure Resources</b> Work with involved units to secure all necessary resources required for managing crisis continuity.	Business Continuity Team Leader	
<b>5. Recover Data and Reports</b> Retrieve and organize essential data and reports required for operations and services, following the specifications in Table 7 on IT and data requirements.	IT Department	
<b>6. Operate Within Available Resources</b> Continue operations and provide services using the procured resources under the crisis continuity framework.	Business Continuity Team	
<b>7. Communicate Updates to Stakeholders</b> Notify relevant units, contractors, partners, and affected stakeholders about the current situation and strategies for managing continuity.	Business Continuity Team	

Steps and Activities	Responsible Role	Completion
<b>8. Maintain Logs and Review Activities</b> Consistently document all activities, tasks, and decisions in a logbook, specifying details such as responsible personnel and timelines. Regularly review the recorded activities for efficiency and accuracy.	Business Continuity Team	
<b>9. Summarize Daily Situation and Plan for Next Day</b> Provide a summary of the current situation and planned steps for the following day to key personnel, including operational adjustments, schedules, and resource requirements.	Business Continuity Team	
<b>10. Submit Regular Progress Reports</b> Deliver progress updates to the Business Continuity Team Leader as per the established schedule.	Business Continuity Team	

### 3) Day 8: Mid-Term Response (1)

Maintain safety as the top priority and adhere to crisis management protocols.

Steps and Activities	Responsible Role	Completion
<b>1. Monitor Recovery Status</b> Assess the recovery status of affected resources, evaluate their necessity, and estimate the time required for full restoration.	Business Continuity Team Leader	
<b>2. Identify Necessary Resources</b> Determine the resources required to resume normal operations and provide standard services.	Business Continuity Team	
<b>3. Report to Business Continuity Team Leader</b> Inform the Business Continuity Team Leader about the recovery status of affected resources. And the essential resources needed to restore normal operations and services.	Business Continuity Team	
<b>4. Coordinate and Procure Essential Resources</b> Collaborate with relevant units to secure resources necessary for normal operations, including: 4.1 Backup locations or workspaces. 4.2 Critical equipment and supplies.	Business Continuity Team	

Steps and Activities	Responsible Role	Completion
4.3 Key IT systems and data. 4.4 Essential personnel. 4.5 Related departments, service providers, and stakeholders.		
<b>5. Communicate Readiness to Team Members</b> Provide a summary of the current situation and the readiness of resources to team members, ensuring they are prepared for standard operations.	Business Continuity Team	
<b>6. Maintain Logs and Review Activities</b> Record all incidents, activities, and decisions in a logbook, specifying responsible personnel and timeframes. Consistently review and evaluate these activities for improvements.	Business Continuity Team	
<b>7. Submit Progress Reports</b> Provide regular updates to the Business Continuity Team Leader, ensuring timely communication of progress and resource recovery status.	Business Continuity Team	

**Drills or Exercises for Plan Implementation are conducted as follows:**

1) **Tabletop Exercise (TTX):**

This type of exercise focuses on identifying strengths, weaknesses, and gaining an understanding of the plans and procedures currently in use by the relevant agencies. It is based on a hypothetical scenario. Participants in a tabletop exercise are typically senior officials, responsible personnel, or key individuals in the respective area.

The advantage of a tabletop exercise is that it does not involve the mobilization of resources, making it a cost-effective and efficient form of training. It allows for testing plans, policies, and operational procedures effectively.

2) **Functional Exercise (FE):**

This exercise simulates an emergency situation as realistically as possible. It may involve the short-term mobilization of materials, equipment, or personnel to the incident site. The objective of a functional exercise is to test or evaluate the functional capabilities of one or multiple departments in managing an emergency.

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