


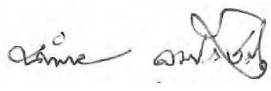


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Objectives and Usage

The Goods Transportation Safety Standards aim at facilitating and applying SCG Safety Framework which is served as guideline foundation for the Management of Occupational Health and Safety and Environment for all companies in SCG with the following essences:

1. To elevate the procedures for Goods Transportation Safety on the road that take account of the significance and risks to have impact on internal and external of SCG through the risk management indicator for personnel, vehicles, and transporting routes.
2. To provide prevention guidelines and best practices to mitigate any potential incidents or transport accidents. This Goods Transportation Safety Standard is deemed appropriate to be implemented in all industries.
3. To explain and demonstrate the measures being taken to ensure safety during transport. The users of these standards must be aware of the regular development of practices and transport controlling equipment. The standards shall not limit or restrict any future measures or gear that help facilitate the safe transport.
4. To cover the enforcement of these standards on all parties in the organization (employee and business partner) to ensure the safety of employee under a unified standard. The mutual responsibilities should be taken charge to be certain that all employees are complied with law or SCG standards, the stricter one is to be followed.
5. To enforce in all areas and businesses of SCG including the subsidiaries or joint venturing companies that The Siam Cement Public Company Limited has management power regardless of types, sizes and products.
6. To be put in immediate force at the new established factories or enterprises. For the existing factories or offices associated with area or working space expansion must comply with not only the Management of Change procedures but also with this stipulated standard.

7. Exception

In case of necessity where the existing corporations or offices or newly acquired companies are unable to comply with these standards due to the nature of organizational structure or type of products, such companies may be granted exception or allowed other appropriate measures not being in alignment with the standards but under recommendation of the experts from SD Office.

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Definition

These below definitions are generally used to explain topic, heading, or terminology that are used in relation to the Office of Occupational Health and Safety and Environment. The additional details could be searched through related document. Any person who needs to create the new definitions is required to complete the registration. The objective of these provided definitions is to be used in the document system of the Office of Occupational Health and Safety and Environment of SCG.

The following list of vocabularies will appear in this document. Apart from the provided words, you can look up the definitions from the document “List of Vocabularies and Definitions used in the field of Occupational Health and Safety and Environment”

Topic/Subject/Terminology	Definition/Explanation
Contract Owner	Companies or departments in SCG that use carrier services, regardless of whether the contract owner is the goods owner
Contract Owner Representative	Companies or departments that the contract owner assign to represent them in handling goods transportation
Carrier	Carrier under SCG’s management (with and without SCG brand logo) as well as those not being under SCG management but having SCG brand logo on the truck (including a Franchise/Agent as agreed in the SDC Meeting No. 2/2011) which cover a routine and a non-routine transport contractor or a spot hire
Driver	Driver of carrier is the individual who the carrier assigns to deliver goods to the contract owner
Transportation Emergency	The occurring incident during goods transportation that the driver requires urgent assistance to prevent the critical impact that might follow
Goods	<p>The finished goods of the companies in SCG to be delivered to the customers, of which involve the following:</p> <ol style="list-style-type: none"> 1. Goods being manufactured by SCG 2. Goods being purchased for sale 3. Goods being manufactured by external suppliers and sale as SCG products including machines and equipment used for goods transportation <p>Note: each transportation may be the goods of one company and materials of other company.</p>
Global Positioning System (GPS)	The recording device of vehicles routing means the device that records and transmits data on the vehicles using Global Positioning System technology

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Hazardous Substance	Hazardous substance under responsibilities of the Department of Industrial Works announced by the Ministry of Industry
Truck	Truck being used for transporting goods to the clients or places specified by the contract owner
Spot Hiring	Temporary use of service of carrier (without contract). Occasional use of service due to immediate necessity, discontinuous or regularly scheduled operation such as having the urgency or abrupt change of service requirement or being unable to use service from the regular carrier with the successive service period of no longer than 3 months
Shuttle	The use of service of regular carrier (with contract). Having scheduled transportation of goods between two regular places with the successive service period of longer than 3 months

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Policy

SCG has established controlling policies on driving and goods transportation for the safety of employees and goods including the prevention of accidents which may cause critical impact on environment and/or lives and properties of organization and communities. The policy provides coverage for employee shuttle bus (executive car, dealer car, bus, van, and company's service vehicle).

Scope

Implementation

Implementation of these standards will cover the transportation described below

1. To enforce in all business units of SCG including business of subsidiaries or joint venturing companies which The Siam Cement Public Company Limited has controlling power
2. To apply with goods transportation on the road from manufacturing factory or warehouse to customers, and from manufacturing factory or warehouse to warehouse or domestic port for staging goods
3. To use with contract carriers
4. To use with the following trucks
 - Truck loaded with goods that the ownership right belongs to SCG, such goods not being transferred
 - Truck having SCG brand logo, even without SCG goods on the truck
 - Special type of truck or goods, obligated to be provided to SCG only, subject to business specification such as CPAC cement truck and PVC powder transport truck
 - Shuttle

Exception

The standard does not enforce when the following cases occur. If any company intends to administer otherwise, the separated management methods and practices can be set forth.

1. Empty Backhaul with no SCG goods on the truck
2. The receipt of goods being procured for sale or goods being manufactured by external suppliers
3. Goods pick-up by customers
4. When the trucks are in the areas responsible by the company's or the customer, do comply with the safety rules set forth by the area owners
5. Package delivery by Courier Services
6. Spot Hiring that the company must stipulate the separated controlling measures
7. Trucks misrouted from the route specified by the company for personal benefit or during robbery

Note: Each business unit may implement the requirements and procedures specified in these standards to manage other types of transportation such as raw materials or work-in-process materials.

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Responsibility

Preface For the clarity of compliance procedures associated with these standards, roles and responsibilities of related parties are established as follows:

Roles	Responsibilities
Business Leader (MD/DMD)	<ol style="list-style-type: none"> 1. To consider the compliance of these standards procedures as direct responsibilities and significant measures in a managerial performance evaluation. 2. To ensure that every plants and companies implementing these standards 3. To ensure that there are enough resources for the company to implement and support the transportation safety measures 4. To ensure that management system for transportation safety has been evaluated the compliances with SCG regulations and national laws
Site / Plant Managers	<ol style="list-style-type: none"> 1. To ensure that there are appropriate procedures in place to operate and simultaneously be implemented in every plant/office 2. To periodically review and evaluate transportation safety to ensure the compliance with SCG regulations and national laws 3. To ensure that plants/offices comply with specified standards 4. To organize the seminar regarding transportation safety standards for employee appropriate to their roles and responsibilities 5. To provide and keep the updated version of the list of qualified carriers pursuant to safety standards for transportation 6. To review and assess transportation hazards and operating results in order to periodically control hazards as specified in the standards 7. To assign a person to prepare documents and oversee the list of authorized personnel to certify and approve the use of carriers' services

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Manager & Supervisor	<ol style="list-style-type: none"> 1. To evaluate the necessity and alternatives for transportation 2. To be responsible for all procedures for selection of appropriate carriers and operations pursuant to SCG regulations 3. To own the evaluation procedures, criteria for determining qualifications and participation in pre-selection and evaluation 4. To arrange processes and assign someone to evaluate and make certain that the standardized procedures have been applied with respect to the full contexts of each work 5. To ensure that the contract business partners comply with the same standard 6. To prepare working environment to be equipped with proper gears and organize an adequate seminar to be certain of the safe working environment 7. To be role model and participate with employee to create the working atmosphere that everyone can exchange queries to eliminate and prevent transport accidents 8. To appropriately monitors the activities to ensure that carriers and drivers can properly operate 9. To lead the accident investigation and efficiently resolve the incident 10. To own the accident investigation procedures 11. To counteract emergency if required
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Procurement	<p>Authorized person from Procurement office is required to</p> <ol style="list-style-type: none"> 1. To act as the System owner and follow through the pre-selection procedures 2. To collect and update documents related to the carrier bidding process and assure that all related parties have the updated version of information to be able to efficiently perform their responsible duties such as <ul style="list-style-type: none"> - submit information indicating rules for driver, transport vehicle and other necessary documents associated with the management system to the carrier - submit necessary supporting data from carriers to other related offices to consider upon safety matter 3. To make certain that any changes that might have impacts on businesses such as purchasing orders of machines or safety gears, etc. must be systematically reviewed and approved by related authorized personnel 4. To keep the list of authorized carriers up-to-date 5. To participate in the regularly scheduled performance evaluation of carrier
Employee & Carrier	<ol style="list-style-type: none"> 1. Employee and business partners involving in transportation, to hold themselves responsible for preventing transport accidents in their working area 2. To prevent accidents from work, employee and carrier have the rights to deny work or stop working in situation they find malfunctioning equipment or hazardous working process 3. To promptly report to the supervisor on the incidents where the truck, working environment, or related equipment are not in good condition to operate, malfunction, or damage 4. To participate in the accident investigation, if related, or follow the instructions to prevent the repeated incident to oneself 5. To attend the seminar relating to their roles and responsibilities
Driver	<ol style="list-style-type: none"> 1. To strictly follow the transportation safety standard 2. Not to violate the life saving rules 3. At time of accident, to promptly inform the supervisor 4. To attend safe driving workshop and other related seminars within the specific timeframe

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Enforcement

Enforcement of these standards must follow the instructions:

1. Establish the management system and working procedures



To achieve SCG vision of safety where there is zero injury and illness free, safe transportation is crucial in business operation. The guideline for transportation safety will be enforced under SCG Safety Framework, in the topic of driving safety.

2. Life Saving Rules

Life Saving Rules or LSR is the regulations for saving lives of all people at work. SCG has, thus, developed Life Saving Rules (LSRs) as an important part of the SCG Safety Framework which every company and factory under SCG must strictly follow pursuant to the announcement no. 3/2016 dated October 27, 2016 from President & CEO of SCG.



Employee and contractors relating to goods transportation activities of SCG must acknowledge the implementation of Life Saving Rules and pledge to strictly comply and not violate “Life Saving Rules”.

SCG’s Life Saving Rules involving transportation safety is described as follows:

Rule 6 Refrain from drinking alcoholic beverages or using addictive substances prior to or while working, driving a motor vehicle or riding a motorcycle	
Rule 7 Wear a safety belt when traveling in a motor vehicle	

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Rule 8	Wear a safety helmet when riding a motorcycle	
Rule 9	Refrain from using mobile phone without hands-free device while driving a motor vehicle or riding a motorcycle	

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Requirements

To comply with the following regulations is considered the minimum requirements to conform to the standards. In case of failing to comply with the regulations is deemed an act of severe violation of LSR.

Any companies, if for the time being, unable to comply with these standards due to the nature of organizational structure or type of products, may be granted exception or establish other appropriate measures not being in alignment with these standards but under recommendation of the experts from SD Office.

General Requirements	<p>The following requirements are general requirements which may play a part in facilitating effective compliance. Company may request for exemption not to comply with general requirements or adapt other appropriate measures under recommendation of the experts from SD Office.</p> <ul style="list-style-type: none"> - Every company and plant/factory operated in Thailand must strictly comply with laws on goods transportation management of that nation or SCG standards, the stricter one is to be followed.
Law Requirements	<p>The following list is a part of laws requirements that are put in force with transportation business activities in Thailand. Transport contractor is directly responsible for compliance function with each type of vehicles and products, even not being listed herewith</p> <ul style="list-style-type: none"> • the Land Transport Act, B.E. 2522 (1979) • the Land Traffic Act, B.E. 2522 (1979) • the Hazardous Substance Act, B.E. 2535 (1992) • the Labor Protection Act, B.E. 2541 (1998) <p>In case that the company and office being operated in other countries where no law on goods transportation management is being enacted, this SCG standard or Thai Law, the stricter one among the two shall be put into force. The company shall consult with or request for recommendation from the expert of SD Office</p>
Transportation Management Requirements	<p>Goods Transportation Management within Goods Transportation Framework can be categorized into 5 working processes</p> <ol style="list-style-type: none"> 1. Planning 2. Qualification and Selection 3. Pre-job Activity 4. Perform Work 5. Post Evaluation

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	<p>Therefore, to be clear and to achieve highest efficiency, plan on the application of these standards, in each working process, shall be established as follows</p> <p>1. Planning</p> <p>During planning process, contract owner and carrier shall comply with the following requirements</p>	
	Requirements for Contract Owner	Requirements for Carrier
1.1 Documentation	Set up the system for documenting and recording important data on goods transportation operation	Acknowledge the documenting and recording system for important data as required by contract owner
1.2 Safety Rule	<p>Disseminate “Safety Rules” policies for safety management and prevention of accident from operations to all employees involving in goods transportation operations, mainly</p> <ul style="list-style-type: none"> - Safety rules relating to transporting activities such as instructions for roadside parking or roadway stopping in case of emergency - Life Saving Rules and specify that compliance with Life Saving Rules is part of employment contract. 	<ul style="list-style-type: none"> - Acknowledge “Safety Rules” of contract owner - Assign a person to be in charge of communicating to related parties and following up on the process
1.3 Incident Reporting & Investigation	Systematically establish the procedures and steps for reporting, investigating and analyzing accidents that may occur from goods transportation	<ul style="list-style-type: none"> - Acknowledge “the procedures and steps for reporting, investigating and analyzing accidents” of contract owner - Assign a person in charge of communicating and organizing seminar for related parties and following up on the process
1.4 Qualification	Specify the minimum qualifications of car and truck driver that are fit for each type of products to be transported and to be in accordance with stipulation of laws	<ul style="list-style-type: none"> - Explore manpower and truck fleet that possess the qualifications as required by contract owner and provide evidence - Set up operating plan ready for use after contract being engaged
1.5 Training	Organize seminar and training programs to create understanding and strengthen ability to perform their duties and responsibilities. Being able to work in accordance with goods	<ul style="list-style-type: none"> - Acknowledge “Seminar Courses” of contract owner - Set up training plan ready for use after being hired

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	transportation plan such as risk assessor must finish the Route Hazard Assessment seminar, transport officer must attend the Fleet Management seminar, etc.	
1.6 Hazard & Control	<p>Organize the Route Hazard Assessment on every route by</p> <ul style="list-style-type: none"> - Identify hazard factors covering the scope of trucks, drivers, and roads. Organize risk reduction measures to meet an acceptable level - Explain hazard factors and reduction measures to carrier and driver - Ensure that the carrier has measures in controlling driver to follow the hazard reduction measures 	<ul style="list-style-type: none"> - Acknowledge the dangers from Route Hazard Assessment conducted by contract owner - Specify measures and guidance in controlling driver to comply with regulated risk reduction measures
1.7 Emergency	<ul style="list-style-type: none"> - Recognize and assess "Emergency" for all types of incidents - Explore and identify the needs for installing equipment in emergency protection and suspension such as fatal accidents, fire, chemical spills, etc. providing full coverage of potential risks in all transport areas - Identify necessary equipment and specifications to be installed on the truck for work and at time of emergency, suitable for each type of products and complying with law - Prepare Safety Data Sheet (SDS) categorizing by types of goods being transported and keep the document ready in the truck at all time as required by law - Organize the inspection, examination, and maintenance of equipment for emergency prevention, with plan to carry out such activities including 	<ul style="list-style-type: none"> - Acknowledge and look into the results of the Emergency Assessment conducted by contract owner - Explore and plan the procurement of equipment in emergency protection and suspension as per the timeline of the contract owner - Review and plan the improvement of emergency preparedness plan being in line with the plan of contract owner - Study and establish guidelines for operation and communications for driver in case of emergency or parking outside the designated parking area - Survey the need of employee to attend seminar or Emergency Response training - Organize the Rescue Team for truck in case of accident during transportation

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	<p>inspection, examination, and maintenance at the frequency stipulated by law</p> <ul style="list-style-type: none"> - Establish emergency control plan for all potential risks - Organize seminar and training in the topics of Emergency Prevention and Termination for workers 	
1.8 Operational	<ul style="list-style-type: none"> - Establish and inform the carrier of safety guidelines for goods transportation and products management - Identify and explain the following Key Performance Indicators <ol style="list-style-type: none"> 1. Lagging KPI, such as accidents from transportation 2. Leading KPI, such as a speeding driver exceeding legal limit and a driver taking 30-minute rest break for every 4-hour driving, etc. - Require alcohol test and prescribed limit for all goods transport driver and contractor - Require the truck inspection to be performed and provide guidance and solutions in case the truck failing the inspection, such as immediate suspension of goods pick-up, etc. 	<ul style="list-style-type: none"> - Acknowledge safety guidelines for goods transportation safety by contract owner - Acknowledge and plan KPI allocation for other related departments and set up system for consecutive follow-up - Survey and design the self-development plan in compliance with employer's requirement such as <ul style="list-style-type: none"> - Safe parking area for drivers on every route - In case of parking in dangerous or non-designated area, require additional measures and instructions on how to receive approval for those measures - Plan the alcohol and drug tests for drivers and contractors including frequency of the test and the record - Survey and plan body and mind check-up for driver - Assign safety officer as required by law for supervising the system maintenance and safety activities

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	2. Qualification and Selection	
	Requirements for Contract Owner	Requirements for Carrier
2.1 Assessment and Selection Process	<ul style="list-style-type: none"> - Appoint persons in charge and working team to consider the qualifications and select the carrier company, team of which comprises the representatives from goods transport-related department, with at least one person from Safety Division - Make sure that the requirements being laid down in the planning process are part of the processes and essential documents for carrier company selection and being effectively disseminated. 	<ul style="list-style-type: none"> - Assign responsible facilitator - Proceed and submit complete set of documents to contract owner
2.2 Selection Criteria	<ul style="list-style-type: none"> - Establish selection criteria - Proceed with survey and assessment of carrier qualifications and capabilities in offering safety activities, at least these following 5 actions, namely <ol style="list-style-type: none"> 1) Internal management 2) Selection and potentials development of trucks drivers 3) Truck management 4) Route hazard management 5) Emergency response 	<ul style="list-style-type: none"> - Facilitate and provide information to contract owner representative upon request
2.3 Approved carrier list and blacklist	<ul style="list-style-type: none"> - Create the Approved Carriers List including the names of the carriers that passed the transport qualifications and capabilities test - In conducting the Approved Carrier List, separate them into 2 accounts comprising <ol style="list-style-type: none"> 1. Approved Carrier List for Hazardous Substance 2. Approved Carrier List for non-Hazardous Substance 	<ul style="list-style-type: none"> - None

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	<ul style="list-style-type: none"> - The conduct of Approved Carrier List must include the sub-contractor of the carrier. - Define the regulations for dismissal of the carrier from the Approved Carrier List. For instance, <ol style="list-style-type: none"> 1. Carrier with temporary suspension of purchase order which deemed to be dismissed from the list 2. Carrier with no service activities for longer than 5 years 3. Carrier that is liquidated or terminates services that contract owner or contract owner representative is using 4. Carrier that the contract owner or contract owner representative canceling service with them - Create blacklist or carriers list or carrier's sub-contractors list indicating the carriers that violate the Safety Rule or not comply with the standard, which may cause critical loss or the company's business refusal. - Establish rules for carrier's blacklist removal such as <ol style="list-style-type: none"> 1. Carrier that is taken over or has a change in management. 2. Carrier that improved services as previously specified 	
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	<p>3. Pre-job Activity</p> <p>After the carrier had been selected by contract owner, prior to job commencement, the carrier must pass final inspection to verify the qualifications and capabilities of the drivers as well as types and specifications of the trucks are as required.</p>
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	Requirements for Contract Owner	Requirements for Carrier
3.1 Driver Qualification Verification	Assign responsible parties to verify the qualifications of the carrier's drivers to provide service to the company, being as defined in the documents or related evidence	<ul style="list-style-type: none"> - Coordinate and facilitate the process of verifying driver qualification to be effectively conducted by the contract owner representative - Improve or change the driver in case defects and non-compliance being found against the requirements
3.2 Truck Qualification Verification	Assign responsible parties to verify the qualifications of the carrier's trucks, being as defined in the contract and complied with related document and evidence	<ul style="list-style-type: none"> - Coordinate and facilitate the process of verifying truck's qualification to be effectively conducted by the contract owner representative - Improve or change the trucks in case defects and non-compliance are found against the requirements

	4. Perform Work	
	Requirements for Contract Owner	Requirements for Carrier
4.1 Engagement and awareness	<ul style="list-style-type: none"> - Organize the activities to show engagement between the managements of contract owner and carrier - Support and promote activities within carrier company to show engagement between the carrier's management and employee 	<ul style="list-style-type: none"> - Organize the activities to show engagement between the carrier's management and employee such as Safety Talk by the carrier's executives and safety officer or other safety-related activities, regularly scheduled at least once every quarter, which shall result in efficient management of the carrier.
4.2 Performance reporting	<ul style="list-style-type: none"> - Conduct the follow-up audit of the operation and report the performance of carrier including the driver being compliance with requirements - If faults being found, the effective communication must be portrayed to the responsible person of the carrier to correct them 	<ul style="list-style-type: none"> - Control every process of operation to be in accordance with contract - Follow-up and report to contract owner regularly such as report on Key Performance Indicators (KPI) - Proceed with the improvement and inform the responsible parties of the contract owner without delay

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4.3 Annual audit	<ul style="list-style-type: none"> - Conduct the performance audit of the carrier's company including sub-contractor (if any) at least once a year to confirm the compliance with the requirements specified in the transport contract and/or any related law - Specify the auditor team with qualification and certification to perform the auditing works, for instance, the auditor must pass the seminar courses on Goods Transportation Safety Management System Auditor. 	<ul style="list-style-type: none"> - Coordinate and facilitate the audit process to be effectively conducted by the contract owner representative - Establish the consecutive plan and proceed with the adjustment to improve the quality of audit results of the company as well as the sub-contractor (if any)
4.4 Punishment	<ul style="list-style-type: none"> - Establish and inform the carrier of the guidelines not to violate the contract owner's Goods Transportation Safety Standard - Set up the punishment for the carrier to improve their management system 	<ul style="list-style-type: none"> - Acknowledge and control procedures not to violate the contract owner's Goods Transportation Safety Standard - Monitor the driver's behaviors and set up the punishment for the non-compliance

	5. Post Evaluation	
	Requirements for Contract Owner	Requirements for Carrier
5.1 Annual vendor evaluation	<ul style="list-style-type: none"> - Conduct the annual Post Evaluation of services performed by the carrier pursuant to the procurement process of each company 	<ul style="list-style-type: none"> - Set up the consecutive plan and proceed with adjustment to improve the quality of audit results of the company including the sub-contractor (if any)

Additional Requirements

The following requirements are additional requirements complying with these standards, which shall be considered as an alternative for usage.

None

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Implementation Process

Key activities and selection of controlling measures to allow effective working or operating system including

1. Operating Procedure / Work Instruction

Both contract owner and carrier company are obliged to set up the Operating Procedure / Work Instruction providing full coverage to all key activities that require control in order to achieve specified targets such as safety stacking on the trucks, tarp tying and covering, safety driving, safety parking for loading-delivery and drop-off as well as emergency procedures, etc.

Operating Procedure / Work Instruction will serve as manual for each working process that the employee must follow. Besides, it will be the management's tool for works monitoring and communication that can build confidence and clarity work for efficiency from all staff. Work instruction should describe each detailed procedure as follows:

Item	Subject/Topic	Explanation-Definition
1	Objective	Work objective / Deliverable
2	Scope	Boundary of work, person, area, equipment & tools, etc.
3	Description of System	Specific system information, Limitation, Flow diagram
4	Safety-Occupational Health Concerns and Warnings	1. Basic safety details when being exposed to SDS, Chemical Hazard and Toxicity and First aid treatment 2. Safety & Occupational health control points
5	Precaution and Mitigation	Special precaution & its mitigation
6	Personal Protective Equipment	Specific PPE requirements that is beyond Basic PPE
7	Role, Responsibility and Qualification	Work procedures, duty and responsibilities of a person involved in each working procedure. Qualifications and training requirement before starting work .

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8	Communication	Describe communication purpose, media used and target receivers
9	Detail of Operating Procedure	Detail (step by step) how to do the job
10	Deviation (In case operating procedures not as described in No. 7	Redefine detailed work step if needed to work differently from this procedure or additional work that isn't covered by this procedure
11	Emergency	Describe what to do when an emergency occurred

2. Documentation and Control

Documentation and control should be set up to support the management to be efficient, accurate, precise, and credible, and to be further enable a more sustainable development as described herewith

1. Data collection and record
2. Data control system
3. Data analysis, summary, and report
4. Document control system and data access rights with permission assigned by levels

3. Audit

3.1 Types of Audit

These standards are the key elements of the compliance part of occupational health and safety management within SCG Safety Framework. The plant manager / manager of the factory or business associated with these standards must proceed with the continuous improvement. Each organization must establish the compliance evaluation mechanism as required by management system and carry out the recommendation from such evaluation to strategize the plan and systematically improve the performance. Such evaluations include

- 1st Party or Internal Audit to be conducted on regular basis, such as, annually. Results will be carried out to be a part of annual management review.
- 3rd Party Audit such as Corporate Division or other departments that are not the contract parties of the activities or external parties certified with international standards having the auditing frequency of one every 3 year.

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3.2 Management Review and Continuous Improvement

The organization's top executives and management team must take Management Responsibility in order to handle the Management Review and Continuous Improvement by

1. Arrange the meeting to discuss among executives comprising top managements and all departments' directors who directly report to them to periodically review the management plan of the company, at least once a year, with the solid plan and agenda.
2. Consider the inputs in the meeting
3. Review the outputs in the meeting, concerning the following matter
 - 3.1 Occupational Health and Safety Policy
 - 3.2 Objectives, targets, and operating plan
 - 3.3 Guideline for improvement, modification, and development of system to foster continuous improvement
 - 3.4 Allocation of sufficient resources and budget for carrying out the operation in compliance with law, of which shall be continuously improved.

4. Training

4.1 SCG's Policy

"Provide training courses to ensure that all employees understand and are capable to confirm their roles and responsibilities"

Reference: SCG Safety Framework Element O. Management Leadership & Commitment, Item 2 (2.7)

4.2 General Requirements

1. Provide the systems for developing and sustaining the competence level of employee and business partner in the operations related to transportation safety including
 - Identification of the necessity of training for manager, employee, carrier, driver, etc.
 - Assessment of the accuracy of the training
 - Collection of data on level of employees' competence and list of authorized personnel
 - Conduct of standard seminar
2. Under these standards, to officially organize the training courses and store the handout of documents. (the document must be recorded as evidence of training courses.)
3. To organize the retraining in case there are any significant modification to these standard and possible to believe that the employees do not have the clear understanding of their responsibilities pursuant to the requirements.

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4.3 Specific Requirements

1. Safety Driving Course for Truck is considered mandatory and necessary for the employed drivers transporting goods for SCG.
2. Specialized courses in the subject of transportation safety will be specifically organized for the individuals based on the person's roles and responsibilities and should be considered a part of individual's qualifications.
3. Statutory courses must be organized as required by law of such nation (if any).

4.4 Training Courses

The recommended training courses should be organized to provide knowledge on roles and duties of each person working in the field of transport safety.

4.4.1 Courses for Awareness Raising

The personnel who works in the field of transport duty is required to have sufficient capabilities to be responsible for the jobs being assigned by being able to:

1. Understand the objectives, principles, and procedures for transportation safety including Safety Rules, roles of their own and role of others involving in transportation safety works
2. Acquire knowledge about prevention of accidents that might occur during transport including the cause-and-effect diagram of transportation process

4.4.2 Specialized Courses

Program: Route Hazard Assessment

This training course is designed for a person whose works relate to transportation safety including

- Truck driver
- Delivery planner

The following subjects show the essential capabilities for the employee working in the field of transportation safety. The levels of required competency depend on each person's roles and responsibilities such as

- Road Accidents Perspective
 - Accidents Record
 - Causes and risk factors causing accidents (Driver, road, street, and environment)
- Definitions of Hazard and Risk
 - Hazard / Risk / Near miss / Accident
- Hazard and Risk Analysis
 - Hazard Identification
 - Simple Risk Matrix / The Qualified Risk Scale
 - Risk Assessment Report
 - Risk Control

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Program: Emergency Response

This course is designed for any person whose job involves transportation safety as follows

- Truck driver
- Emergency response team or a person having a role in responding to emergency
- Conducting emergency plan
- Transportation safety emergency response drill

These following topics show the essential capabilities for the persons working in the field of transport safety which specified levels of competency are determined by the individual roles and duties such as

- Definition of Emergency
- Emergency Response Team
 - Structure of Emergency Response Team
 - Roles and Responsibilities
- Emergency Response
 - Procedures and work instructions to prevent emergency
 - Restoration after emergency response

Program: Fleet Management

This course is designed for any person whose job involves transportation safety as described

- Transport manager
- Transport plan conductor

These following topics demonstrate the important capabilities for the persons working in the field of transport safety which specified levels of competency are determined by the individual roles and duties such as

- Importance of transport works
 - Definition and importance of transport works
 - Roles and duties of carrier workers
- Road Safety Management
 - Safety policy and organization structure
 - Regulations
- Driver Management
 - Management of the driver
 - Development of the driver
- Vehicle Management
 - Inspection requirements for vehicle and its safety equipment
 - Daily car check-up prior to pick-up date by the driver
 - Random inspection of vehicle's condition and safety
- Journey Management
 - Delivery Plan
 - Locating hazards on the road
- Accident Report
 - Accident preliminary analysis
 - Conduct of report at time of accident

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- **Instruction for Report of a Truck Accident**

- Safety Driving
- Effective Communication
- GPS System for Transportation Control

Program: Incident Investigation

This course is designed for a person whose job involves transportation safety as described

- Incident investigator
- Safety officer

These following topics demonstrate the necessary capabilities for the persons working in the field of transport safety which specified levels of competency are determined by the individual roles and duties such as

- Importance of incident investigation
- Roles and duties in incident investigation
- Tools and how to operate them in the incident analysis and production of measures for solution and prevention
- Follow-up on the implementation of solution and prevention measures

Program: Goods Transportation Management System Auditor

This course is designed for a person whose job involves transportation safety as described

- Inspector for the implementation of these standards

These following topics demonstrate the necessary capabilities for the persons working in the field of transport safety which specified levels of competency are determined by the individual roles and duties such as

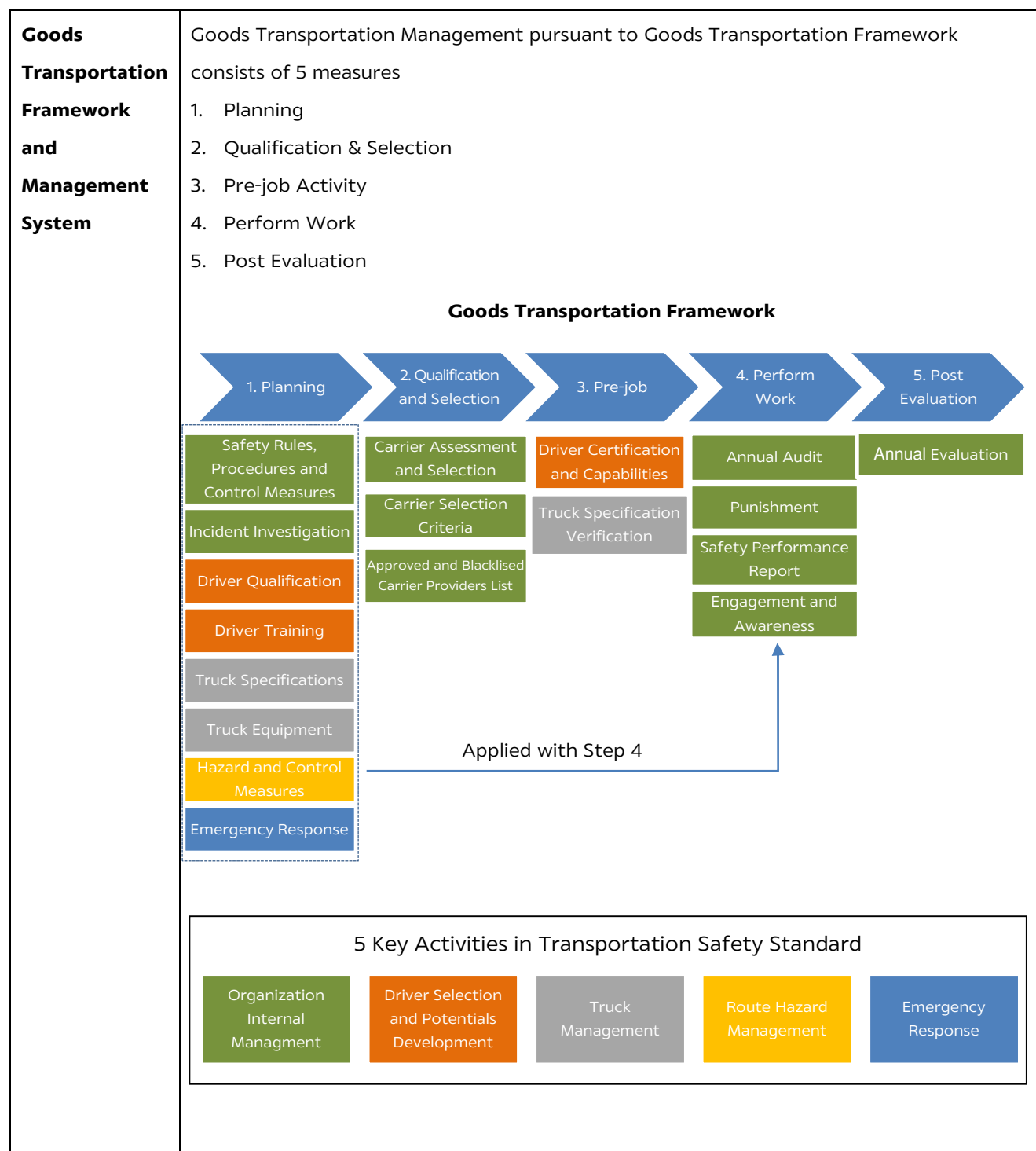
- Requirements of these standards
- Implementation measures of these standards
- Audit measures

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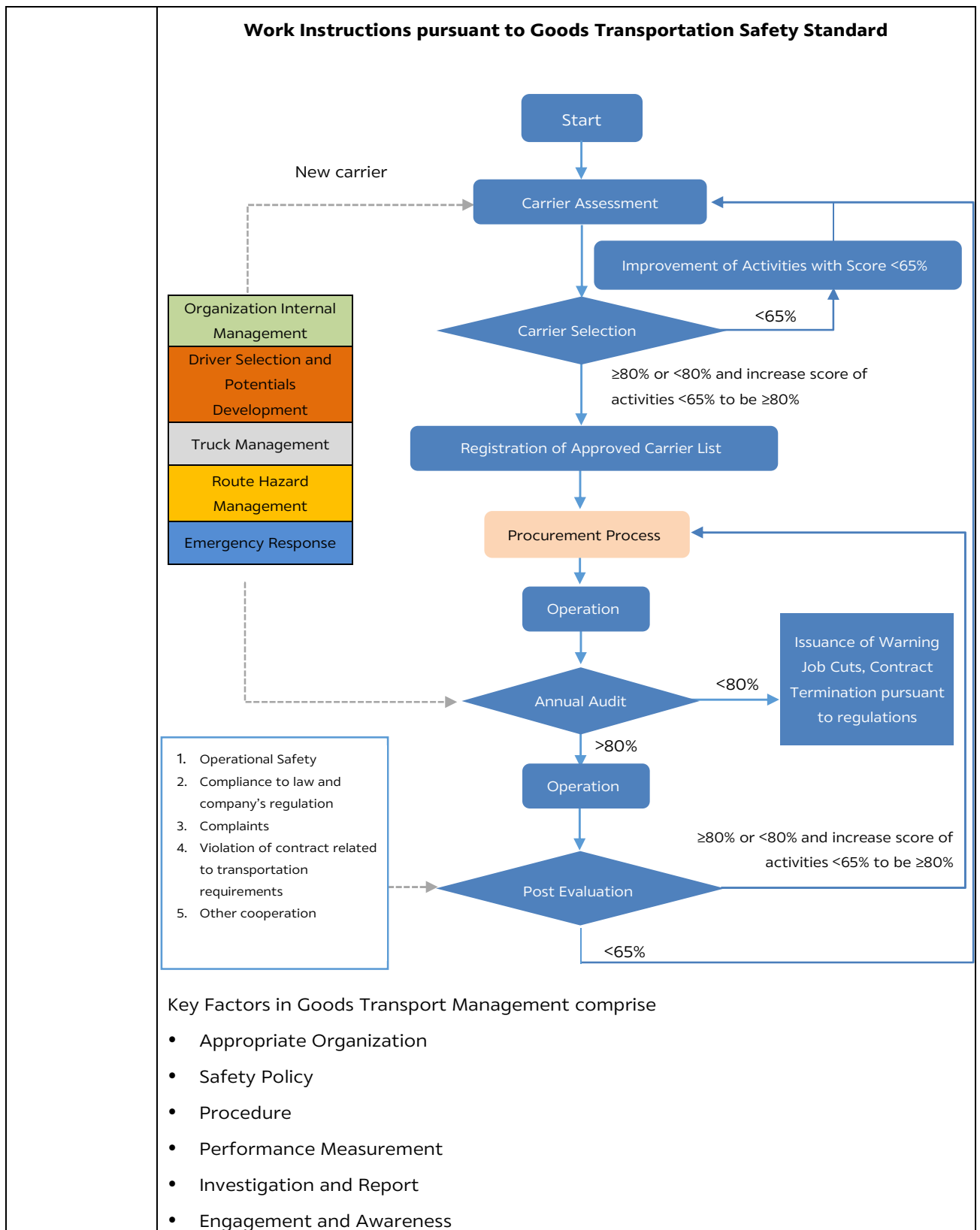
Supporting Materials to comply with these Standards

The following details are supporting knowledge for the standards implementation:



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Driver Standard	<p>Key Factors in Driver Management comprise</p> <ul style="list-style-type: none"> • Screen to recruit • Training and Evaluation • Welfare and Turnover rate • Readiness • Monitoring system <p>Minimum Qualifications and Characteristics of Truck Driver</p> <ol style="list-style-type: none"> 1) Own a license for the class of vehicles specified by law 2) Have at least one year of licensed driving experience for the required vehicle type specified by the employer 3) Be a year older than the minimum age eligible for obtaining each category of driving license and not more than 63 years old 4) Possess at least 6th grade educational background or being literate 5) Pass a standard health check required by the employer with at least a list given in Appendix 9. A driver older than 60 years old is subject to some additional check-up due to higher risk of health problems 6) Pass a Driving Safety Course to be reviewed on annual basis 7) Never be prohibited from being a driver in the company in the same industry 8) Pass a Driving Aptitude Test 9) Pass a knowledge test concerning Traffic Regulatory Measures or Highway Code 10) Obtain criminal record clearance (applicants provide initial information and employer later performs the investigation) 11) Wear appropriate attire for the job
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Truck Standard	<p>Trucks used for goods transportation to the customers or any specified destination by the employer being classified below</p> <ol style="list-style-type: none"> 1. General goods truck 2. Chemical or hazardous substance truck 3. Pick-up truck for goods <p>Key factors in truck management comprise</p> <ul style="list-style-type: none"> • Prevention Checking • Maintenance • Safety Equipment • Monitoring system <p>Minimum Qualifications and Specifications of Truck</p> <ol style="list-style-type: none"> 1) Type, size, and weight of truck must be capable of transporting goods pursuant to the characteristics and types of products with safety and compliance with law 2) Truck's useful life after its initial registration <ol style="list-style-type: none"> a) Useful life of general-purpose truck is not more than 10 years b) Useful life of specialized truck is no longer than 15 years and an additional check-up is required after 10 years, trucks of which include CPAC concrete mixer truck, semi-trailer for bulk cement, ten-wheeled truck for bulk cement <div style="text-align: center;">  </div> <p>Essential Equipment for Truck</p> <ol style="list-style-type: none"> 1) Install and use GPS to send real-time truck usage data or with frequent reports up to every 20 seconds and assign a person to monitor and inspect for 24 hours or during transport duration 2) Install ID card swipe machine that connects the driver's license data to Center Operation of Department of Land Transport as being required 3) Provide an audible warning alarms system at least for these following alerts <ol style="list-style-type: none"> a) Speeding over limit b) Driving in the restricted area c) Parking on the shoulders, roadway, or dangerous spot d) Driving continuously without a rest break
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	<p>4) Install dual-camera (front and in-cabin) to record the driver's behavior and situation in front of the vehicle during transport, which can be kept for at least 15 days for past date record retrieval</p> <p>5) Provide equipment and tools for hazard prevention in an accident or emergency as required by law concerning types and hazard of the products</p> <p>6) In case of hazardous substance transport, the truck must comply with the required law.</p> <p>7) For vehicle using natural gas as fuel must comply with the Announcement of the Ministry of Land Transport regarding criteria for certified standards of NGV fuel system components.</p> <p>8) Install safety belts in all vehicles</p> <p>9) Ensure the safety level of vehicle weight and not exceed weight limit specified by truck manufacturer or regulated by law</p> <p>10) Clearly display contact number of carrier company on the truck with telephone number that is available 24 hours a day in case of emergency</p>
Journey Standard	<p>Key factors in transport management comprise</p> <ul style="list-style-type: none"> • Route Hazard Assessment • Communication • GPS Monitoring <p>Work Instructions for Hazard Control on the Route</p> <ol style="list-style-type: none"> 1. Assess the potential hazards in transport by identifying hazards and providing reduction measures and locating the safe rest area. Do constantly update the hazard assessment. 2. Disseminate the results of hazards assessment to the driver for compliance 3. Monitor the transport via GPS
Emergency Response Standard	<p>The incidents occurring during transport that the driver needs emergency assistance to prevent the critical impact that might follow such as</p> <ol style="list-style-type: none"> 1. At time of road accident, with injured or dead victims, critical damaged, burnt and unrelocatable truck, 2. The spill of product from container leads to inability to cease the incident and the need for assistance to prevent further impact on water systems, marine life, livestock, cultivation and seeding caused by release/spill of the Company transported material, which might lead to necessity to announce the community warning, partial road closure, evacuation or shelter in place 3. Incident involving container failure, securement, handler or management of specialized equipment to stabilize the products to safety 4. Incidence of driver's immediate illness which affects the driving efficiency <p>Key factors in emergency management include</p> <ul style="list-style-type: none"> • Emergency drill • Emergency Response

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Appendix

Appendix 1 Severity level of the accidents occurring during transportation

Severity level of accidents occurring during transportation can be categorized into 3 Tiers

Severity level	Definitions
1. Low	<p>Released Quantity:</p> <p>Spill* of < 50 kgs of chemical with no other impact</p> <p>Spill* of < 1000 kgs of resin or similar material with no other impact</p> <p>Human Impact: Injury of any party with resulting in precautionary medical visit</p> <p>Environmental Impact: -</p> <p>Community Impact: Immediate area around incident is restricted to only emergency response personnel.</p> <p>Company Direct cost/loss: < \$2,500 USD or defined by Business Unit</p> <p>Reputation: No media involvement or Company is not mentioned in the media coverage.</p>
2. Medium	<p>Released Quantity:</p> <p>Spill* of ≥ 50 kgs of chemical with no other impact</p> <p>Spill* of > 1000 kgs of resin or similar material with no other impact</p> <p>Human Impact: Injury of any party with MTC/RWC</p> <p>Environmental Impact: Incident involving Container failure, securement, or handler needs response assistance</p> <p>Community Impact: Any community alert given as a result of the incident (may be precautionary only) and / or partially highway closed</p> <p>Company Direct cost/loss: ≥ \$2,500 USD or defined by Business Unit</p> <p>Reputation: Repeated local media coverage and media attention outside of the immediate area</p>
3. High	<p>Released Quantity: -</p> <p>Human Impact: Fatality, DAWC/LTI to any party</p> <p>Environmental Impact:</p> <p>: Measurable/visible damage to buildings livestock, vegetation, crops fish water systems caused by release/spill of the Company transported material</p> <p>: Third party Carrier/ Third party Warehouse operator unwilling/unable to respond to incident and/or product breaches an environmental system</p> <p>Community Impact: Any significant impact as a result of the incident e.g. community evacuation, shelter in place, totally highway closed, maritime traffic stops for ≥ 1 hr.</p> <p>Company Direct cost/loss: ≥ \$100,000 USD or defined by Business Unit</p> <p>Reputation: Significant local media coverage or any national or international media involvement</p>

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Appendix 2 Instructions and means of communication for the drivers in case of roadside parking or roadway stopping during an emergency

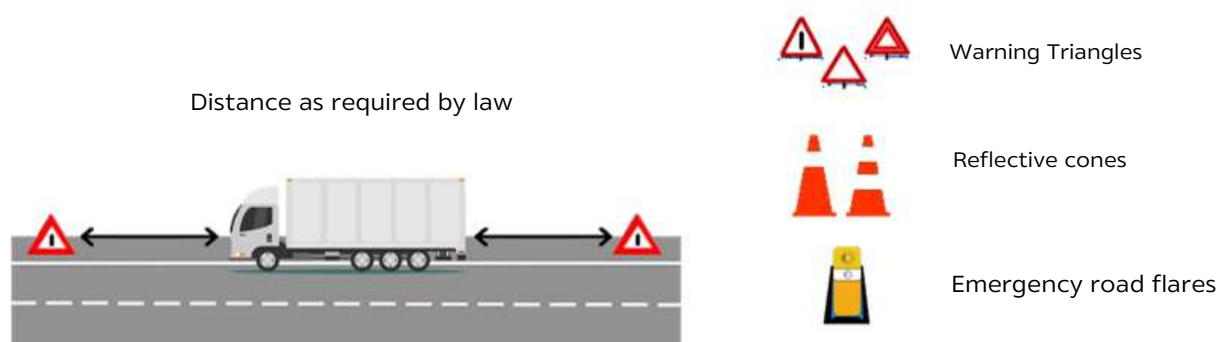
Instructions

- 1) To avoid traffic blockage, park as close as possible to the roadside
- 2) Turn on emergency light when parking at all time, perform self-check if the light is working
- 3) Display emergency signals such as 1) reflective cones 2) warning triangles or 3) emergency road flares in front and behind the vehicle with the following distances:
 - In front of the vehicle: 5 metre
 - Behind the vehicle: 5 metre and 50 metre

Note: Under the announcement of the Department of Land Transport on displaying the emergency signals or signs on the road when needed to stop the vehicle on the roadway or shoulder of the road B.E. 2561 (2019) by placing at least 2 pieces at the front and the back of the vehicle at the distance of not less than 50 metre. Unless necessary being unable to display the signals or signs at the required distance, do provide the emergency signals or signs at the appropriate distance to alert the following driver to safely stop the vehicle.

Communication measures

- 1) After the driver parked the vehicle and displayed the emergency signs, the driver shall take photos of a vehicle to demonstrate the parking location, emergency light turning-on, and emergency signs being displayed, and submit to the carrier company via designated channel right away.
- 2) The driver reports the incident and the need for emergency parking to the carrier company for the hazard assessment or additional measures, if needed.



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Appendix 3 Examples, operational procedures of the carrier companies

These following subjects are the examples of procedures that the carrier companies are required to develop as their own work instructions

1. Locate the safe rest areas for the driver to take a break for every transport route. In case the need to park at unsafe or undesignated area arises, provide the additional measures which require the approval from the authorized personnel
2. Conduct the alcohol test on the driver and transport crew every time before picking up goods at the company, factory or warehouse of the contract owner or contract owner representative. The alcohol must be at 0 mg%.
3. Conduct the drug test on the driver in a timely manner, but once not longer than 3 month per person
4. Conduct the physical and mental check-up for the driver before work. The driver must show the driver readiness state with no symptom of illness and no medication causing a drowsiness side effect or impairing driving skills that cause danger during driving.
5. Perform vehicle's inspection before picking up goods the goods at the company, factory or warehouse of the contract owner or contract owner representative.
6. Provide work instruction and communication measures to the driver in case of emergency or parking at non-designated location
7. Appoint the safety officer as required by law to administer the management system and safety promotion activities
8. Set up the system for random inspection from video footage from inside car dashcam which contract owner or contract owner representative could perform random inspection.
9. Implement KPI as required by contract owner or contract owner representative comprising at least
 - Lagging KPI, such as accidents from transportation
 - Leading KPI, such as speeding driver exceeding legal limit and driver taking 30-minute rest break for every 4-hour driving, etc.
10. Set up the incident response procedures categorizing by the levels of violence to handle emergency during transport in writing and keep it within the truck at all time. The organizer of the emergency response manual is required to complete the training courses designed for emergency response.
11. Organize the Rescue Team for truck in case of accident during transportation for hazardous substance. Provide the equipment for emergency response by types and hazards of products. Rescue team members are required to complete the training courses designed for emergency response.
12. Set up the Incident Investigation and Reporting procedures to report all incidents to contract owner or contract owner representative. Incident investigators are required to complete the training courses designed for incident investigation.

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13. Organize emergency response drill at least once a year which could be co-organized with other carriers.
14. Organize training for the drivers, only for the necessary target, by considering the full coverage of learning and development model of 70:20:10 and determine the evaluation measures after training to ensure the understanding of the drivers towards transport safety before commencing work.

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Appendix 4. Evaluation form for selection and review of safety practice of the carriers

Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1. Management System							
Organization							
1.1	Possess a clear management structure that indicates roles and responsibilities of each position in the organization, and announce to the employee for acknowledgement and further proceeding	<ul style="list-style-type: none">- Review the Organization Chart focusing at the transport department. The compulsory positions include the Management team, key working teams to achieve target, accounting/treasury team, human resources management team, securities team- Announce the organization chart openly in the company for the employee’s acknowledgement- Have clear job description identifying duties and jobs assigned to each position- Company must describe roles and responsibilities of Transport department or other related transport jobs activities in connection with other departments	No Organization Chart	Lack of team members or assigning multiple tasks to one assignee or unclear job description stating too ambiguous and broad duties	Have full team members with clear separation and no overlap between responsible parties. Have job description clearly stating job details of each position		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.2	<p>Appoint safety officers and notify the list of safety officers as classified below:</p> <ul style="list-style-type: none"> - technical level (for business partners from 20-49 people) - advanced technical level (for business partners from 50-99 people) - professional level (for business partners of more than 100 people) 	<ul style="list-style-type: none"> - Send manager or leader to attend the seminar program for Safety officer at supervisor level and the Safety officer at professional level. The company with more than 20 employees must appoint the safety officer at technical level, or safety officer at advanced technical level, or the safety officer with professional level - Obtain safety officer certificate and safety officer at professional level program transcript - Provide announcement of safety officer appointment - Provide proof of registration of safety officer with Department of Labour Protection and Welfare 	None	Insufficient evidence or Safety Officers are unable to describe their job details.	Complete evidence and Safety Officers are able to describe their job details.		
1.3	<p>Appoint safety representative to coordinate on safety matters and perform inspection at workplace or random inspection on a regular manner of at least once a month</p>	<ul style="list-style-type: none"> - Appoint safety officer - professional level in the company as required by law - Provide job description for the key positions in transport such as vehicle inspection mechanic, safety representative and job assignment representative or job details form stating duties and responsibilities of each position in the organization chart 	None		Yes		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.4	Set up the requirements, policies or visions regarding safety in writing and be signed by top executive	<ul style="list-style-type: none"> - Set up at least one clear policy concerning transport safety such as Narcotic Policy or Alcohol Policy, etc. - Set up annual review at least once a year - Assess the actual communication behaviors from policy announcement, weekly/monthly meeting minutes, drivers' inquiries on their understanding and implementation 	No proof in writing	Provide the announcement in writing but insufficient communication regarding safety or have no policy review for at least once a year	Provide the announcement in writing with detailed communication regarding safety or have annual policy at least once a year		
1.5	Set up the requirements or policies concerning environment in writing and be signed by top executive focusing on disposal of waste, battery, tire, and reduction of impact on community	<ul style="list-style-type: none"> - Set up at least one clear policy concerning each community such as the carrier's waste management policy, etc. - Set up annual review at least once a year - Assess the actual communication behaviors from policy announcement, weekly/monthly meeting minutes, drivers' inquiries on their understanding and implementation 	No	Provide the announcement in writing but insufficient communication regarding environment or have no policy review for at least once a year	Provide the announcement in writing with detailed communication regarding safety or have annual policy at least once a year		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.6	Set up the waste disposal procedures for battery, tire and engine oil for the company or subcontractor to accurately follow	<p>The company must set up waste disposal plan or evidence that displays waste disposal procedures and frequencies</p> <ul style="list-style-type: none"> - In case of selling vehicles' tires or engine oil to the buyer, provide the purchasing evidence such as receipt, buyer's ID for further inspection - If the third party provides maintenance service such as changing the engine oil, identify names and addresses of the companies or stores that provide service and dispose waste. - If the company keeps the tire or perform the change of engine oil themselves, the assessor must take a photo of the place storing tires, and batteries, and changing engine oil as inspection evidence of parking and maintenance. If the oil leakage being found, ensure that engine oil won't spill into water sources or public canal. 	No evidence of waste disposal or waste selling without controlling the disposal measures	Operate waste disposal partially correct and have insufficient evidence, especially relating to engine oil, battery, tire	Systematically operate waste disposal and have complete evidence of waste disposer such as waste disposal permits and waste transporter license		
1.7	Implement the policies to develop organization and business plan	<ul style="list-style-type: none"> - Review action plan/project in compliance with policy (efficiency increase, safety, service, employee) - Review operating plan and performance 	None	Yes, and conforming to safety policy	Yes, and conforming to safety policy and		

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					achieving operating plan		
Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.8	Set up the indicators for policy and management efficiency such as accident rate, percentage of flawless deliveries, fuel consumption efficiency, customer satisfaction, etc. Progress to achieve the goal and continually improve the system process	<ul style="list-style-type: none"> - Possess at least one safety performance indicator that clearly designed the target value - Have documentation process to systematically analyze and evaluate, of which can be randomly inspected - Able to display efficiency indicator and retrieve a past date record for at least 3 months - Conduct process evaluation and improvement to achieve each indicator target 	None	Yes, but insufficient	Yes		
Procedure							
1.9	Indicate the operational process for transport starting from taking order to delivering products to customers	<ul style="list-style-type: none"> - Provide document displaying workflow generally in the form of Flow Chart or Procedure - Provide step-by-step process and identify the responsible parties and procedures (require the process of alcohol or narcotic inspection) - In case of transporting variety of goods, present at least one type of goods' transport procedures 	None / In progress	Yes, and not complied	Yes, with evidence and completely complied as required		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.10	Possess the data collection procedures concerning errors in each working process. Set up the guidelines on documenting the mistakes, analyzing and rectifying the critical errors to be used in the development of transportation operating manual. Have the clear prevention measures	Consider the documents displaying guidelines on handling mistakes or abnormalities, analysis procedures, and follow up process. Reviewing complaint and claim that had been reported. In case there is no claim/complaint, assess the procedures document for ability to proceed.	None / In progress	Yes, but not being complied or not fully or not regularly executed	Yes, and fully complied		
Performance							
1.11	Measuring Past Performance from Lagging KPI and Leading KPI	KPI shows the achievement of performance target. If not, require the pursuit of actions together with follow up measures	None / or have KPI but not achieving target	Have KPI / Operating performance not achieving target but following up with solution	Have KPI / Operating performance achieving target		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.12	Collect statistics, analyze data, conduct report and suggestion regarding the encountering with danger, illness, or annoyance of neighbors from operation for the management or related parties to use in safety procedures	Review accident statistics report and connection with the company's policies	None				
1.13	Organize the monthly meeting to review performance by using Leading KPI and Lagging KPI and determine solution or improvement measures	Review the monthly meeting minutes to see if such KPI has been utilized. In case of missing the plan, consider the countermeasures to further proceed.	None	Yes, but not complete	Yes		
Incident Investigation and Reporting							
1.14	Own the accident reporting procedures to report accident to contract owner	Review the documents displaying accident reporting procedures or employee's manual stating reporting guidelines or inquire employees	None		Yes		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.15	Analyze the accident and occurrence that may cause the accident (including details of the incident, cause of casualties, and guidelines for improvement and prevention) by reporting to the related division and contract owner company	Inquire the responsible parties and check the documents to ensure the actual operation and efficiency as well as the use of tool for analysis. The solution measures address the right cause of the problem. The follow-up on the correction. In case of no accident, put in the full score.	None / In progress	Yes, but not fully complied	Yes, and completely complied or no accident being recorded for more than 3 years		
1.16	Assign responsible parties for correction and prevention measures and follow-up on the matters	Inquire the responsible parties about the guidelines on investigation and check the documents for actual operation and efficiency	None		Yes		
Engagement and Awareness							
1.17	Report status of job insecurity and clarify details in Tool Box for experiences sharing to create awareness and precautions to avoid repetitive incident	Record the meeting with the driver including the safety content, list of attending drivers. The meeting should be held at least once a month with 100% participation of employee (gradually record in Tool Box)	None	Yes, but not fully complied or not attending all meetings	Yes, and having record of every matters discussed in the meeting in tool box		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
1.18	Top executives and safety officer-management level of the business partner need to regularly conduct safety talk at least once a month.	Review the meeting documents or Line Walk record of the top executive	None		Yes		
1.19	Communicate about safety news and continuously update the latest incident	Check the announcement on the bard, inquire the employee about their understanding	None		Yes		
1.20	Being certified by international standards such as ISO9001, ISO14001, and ISO39001, Qmark or other certifications	Check Certificates and evidences	None		Yes		
1.21	Be the memberships and engage in activities of Federation of Professions or legally registered Professional Associations	For example, the Federation of Thai Industries, the Land Transport Association of Thailand, the Eastern Transport Association - Check proof of evidence	None		Yes		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2. Driver Management							
Recruitment							
2.1	Have proper guideline for recruitment, inspection, and documentation of employee's information	<ul style="list-style-type: none">- Establish procedures for employee recruitment- Proceed with documentation of employee's information including official documents, driving license as per the type of vehicle, and ID- In case of no procedures in writing, alternatively proceed with the review of employee's profile for the qualifications and recruitment measures- In case there is no recruitment of new employee, provide the profile of current employee	None / In progress	Yes, but incomplete	Yes, and fully complied		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2.2	Conduct the proper driving test to assess skills of the drivers before recruited	<ul style="list-style-type: none"> - Request for the driver's skills test template such as driving, parking, giving signals, and gear usage, etc. by specifying scoring criteria to pass the test and having the assessor concluded the result before recruitment or not - Evaluator passing the related training or having proper experience or not 	None / In progress	Yes, but incomplete	Yes, and fully complied		
Training and Evaluation							
2.3	Provide training for the driver pursuant to Driving Safety Course: SDC) by institutions certified the Department of Land Transport and international school for driving such as Smith System in the subject of driving safety before recruitment and regularly review at least once a year	<ul style="list-style-type: none"> - Request for the plan for training all new and old employee - Review actual training against plan - Conduct training evaluation - Evaluator having proper experience or not 	None / or possess a plan but haven't sent any driver to have training as planned	Yes, possess a plan but haven't sent all drivers to have training as planned	Yes, possess a plan, and completely sent all drivers to have training as planned		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2.4	Possess a test on law on highways, traffic law, safety attitude test by carrying out behaviors interview and basic job training for the driver	<ul style="list-style-type: none"> - Possess a plan for annual seminar and carrying out the training for all employee, plan of which would consist of training title, list of employees to take the training, resources for the training such as budget and instructor. It could be internal training such as language course for employees - Review the plan in case of initial proceeding - Inspect the plan and audit the result of the procedure if it is progressing as scheduled and expecting the result. - Provide evidence of actual training being organized such as photograph or training registration, etc. - For monitoring the plan, the company must present the proof of attendance 	No plan / or possess a plan but haven't sent any driver to receive training as planned	Yes, possess a plan but haven't sent all drivers to receive training as planned	Yes, possess a plan, and completely sent all drivers to receive training as planned		
2.5	Driver receives basic training on vehicle and equipment check-up and maintenance	<ul style="list-style-type: none"> - Possess evidence of periodically organizing training on vehicle check-up and maintenance by the trained mechanic only 	No plan / or possess a plan but haven't sent any driver to receive training as planned	Yes, possess a plan but haven't sent all drivers to receive training as planned	Yes, possess a plan, and completely sent all drivers to receive training as planned		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2.6	Provide a basic firefighting and first aid training courses	- Possess plan and result. If no plan being executed for the current year, consider the previous year's plan and result.	No plan / or possess a plan but haven't sent any driver to receive training as planned	Yes, possess a plan but haven't sent all drivers to receive training as planned	Yes, possess a plan and completely sent all drivers to receive training as planned		
2.7	Provide a safety at work training (not SDC) such as working at height or lifting and handling, etc.	- Possess plan and result. If no plan being executed for the current year, consider the previous year's plan and result.	No plan / or possess a plan but haven't sent any driver to receive training as planned	Yes, possess a plan but haven't sent all drivers to receive training as planned	Yes, possess a plan and completely sent all drivers to receive training as planned		
2.8	Driver receive a scheduled health check-up, fully checking for the diseases that would obstruct driving. A check-up plan and result must be well-documented and followed-up before they can start working.	<ul style="list-style-type: none"> - Assess check-up plan of new and existing employees - Assess the full medical check-up, adding the occupational risk factors including eye acuity, color blind, hearing, blood pressure, diabetes, and epilepsy - Assess the driver's check-up result if the plan has been followed through. - Review whether the monitor has been set up. Comparing last year and current year to see if any action has been taken to improve the result. 	No plan / or possess a plan but haven't sent any driver to receive training as planned	Yes, possess a plan but haven't sent all drivers to receive training as planned	Yes, possess a plan and completely sent all drivers to receive training as planned		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2.9	Display the rules and responsibilities of employees including penalties and announce them for employees' acknowledgement	- Use any means to display rules and responsibilities of employees and ensure their acknowledgement such as employees' manual that describes rules and responsibilities or internal notice, etc.	None	Possess a manual or put up the notice but employees haven't known about it.	Possess a plan but not submitting it for scheduled inspection. Have a preemployment medical test and mid-year check-up		
Welfare and Turnover							
2.10	Define working days and non-working days and properly operate (Law requires 10-hour rest break)	- Define working days and non-working days and announce them to employees - Announce annual holidays for employees' information which can be put on a notice board	None / In progress	Yes, but incomplete	Yes, and fully complied		
2.11	Office provided with facilities to help reduce driver's fatigue before retrieving document such as parking area, rest area, toilet	Check the actual facilities and inquire employees	None / In progress	Yes, but incomplete	Yes, and sufficient		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
2.12	Provide enough safety equipment, prevention gears, individual safety equipment such as helmet, safety shoes, safety glasses, reflective cloth	Randomly question the employees	Not enough for operation	-	Provide enough PPE		
2.13	Possess driver's performance evaluation to incentivize the employees to do better and achieve target by rewarding the well performed employee or providing welfare, etc.	Check document or announcement or evidence of provided reward and question the driver	None / In progress	Have document but incomplete evidence	Possess document and fully complied		
2.14	Gather the driver's Turnover Ratio for analyzing and finding out reasons of resignation	Review and analyze statistical document for improvement	None	Data has been gathered but not analyzed for further development	Data has been gathered and analyzed for improvement.		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
Readiness							
2.15	Regularly perform alcohol check on driver before and after transport duties	<ul style="list-style-type: none">- Plan the alcohol check to ensure transport safety (if none, request for daily inspection document)- Use a standard and reliable breathalyzer- If alcohol check was performed by the client, present the evidence of test frequency. The alcohol check should be performed on every driver every day before and after work.- Stipulate the guidelines of penalty in case the alcohol or narcotic found in the breath	None / In progress	Yes, but incomplete	Yes, and fully complied		
2.16	Regularly perform narcotic check on driver	<ul style="list-style-type: none">- The operator must present evidence including complete test plan and result of narcotic at least once every 3 months- Stipulate the guidelines of penalty in case the test shows the narcotic use	None / In progress	Yes, but incomplete	Yes, and fully complied		
2.17	Assess rest period of the driver that the period must not be less than 10-hour as required by law	The operator must present time sheet recording the driver’s clocking in and clocking out time each day and showing no less than 10-hour turnaround	No control	Control time but missing the 10-hour target but more than 6 hours	Control time and fully complied with plan		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
Monitoring							
2.18	Monitor driver’s behavior when driving from the dashcam	- Perform random assessment of the monitoring from the driver’s behavior evaluation form - Consider the monitoring resulting - Repeated wrongdoings of the same wrongdoer	None / or only when the incident occurs	Yes, but only when the incident occurs and irregularly perform random monitoring	Yes, but only when the incident occurs and regularly perform random monitoring and follow-up		
Truck Management							
Inspection							
3.1	Driver properly and thoroughly check the vehicle and does it regularly	Check document for accuracy and thoroughness of the vehicle check	None / In progress	Yes, but incomplete and incorrect	Yes, and completely complied and correct		
3.2	Conditions of the truck and its equipment are clean and ready for work.	Assess by checking the truck onsite whether it is complied with regulations such as truck’s life expectancy, equipment being maintained in the efficient state	Improper condition, inadequate equipment	Adequate equipment but part of them are out of order	Good condition, adequate equipment, clean and ready to be used		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
Preventive Maintenance							
3.3	Set up the vehicle inspection and periodic maintenance plans to be properly handled	- Set up vehicle inspection and periodic maintenance plans to ensure of matter and time to proceed - Manage repairs record sheets identifying repaired items, defect items, date of repairs, and mechanic or garage’s names	None / In progress	Yes, but incomplete	Yes, and completely complied		
3.4	Conduct vehicle usage log and maintenance/repairs record of each vehicle	Possess a file for maintenance/repairs record of each vehicle	None / In progress	Yes, but incomplete	Yes, and completely complied		
3.5	Monitor the vehicle for Unplanned Breakdown	Gather monthly information on numbers of broken car during transport to monitor transport delay and expense for external repairs The control index should be set up basing upon the number of broken cars per total cars such as 5%, etc. by collecting data on break down indication to analyze and find solution.	None	Yes, but not monitored	Yes, completely complied		
3.6	Provide replacement car during repairs	Review the number of vehicles being stated in the contract and spare the number of similar types of car, including the spare car, at the company or at other car’s fleet that can be arranged for replacement.	None		Yes		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
Safety Equipment							
3.7	Truck must be fully and properly equipped with good-condition safety equipment such as warning triangles for emergency parking, reflective cones, and emergency road flares, etc.	Assess the truck’s safety equipment onsite	None / Yes but not complete / In progress	Yes, but not matched the specifications	Yes, and matched the specifications		
3.8	Install the vehicle tracking system for real-time status of truck and goods by using GPS	Assess GPS equipment and inspect the truck onsite	None / Yes but not complete / not matched the specifications / In progress		Yes, complete and matched the specifications		
3.9	Monitor the driver’s behavior through installed dashboard camera	Inspect the actual camera whether it can record incidents both inside and outside of vehicle’s cabin	None or not record incidents inside and outside of cabin	Monitoring but not completely or not dealing with the misbehavior occurrence against regulations	Monitoring, Recording and dealing with the misbehavior occurrence against regulations		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
Monitoring System							
3.10	Use GPS to monitor vehicle and goods not to go off route	Assess the onsite system for the actual monitoring comparing to the delivering route information	No monitoring / only monitor when receiving alert notification		Monitor once receiving alert notification / randomly monitoring		
Other							
3.11	Office of the operator, parking area, and maintenance garage are located properly, convenient for operation and reducing impact on surrounding community	Area is tidy and safe, provide adequate lighting, and properly equipped with fire extinguisher.	None	Yes, but not proper	Yes, and proper		
3.12	Repairs in internal operated auto shop must be proceeded by trained and certified mechanic.	Review academic records of the mechanics or certificates relating to maintenance. Not allowing the trainee to repair the vehicles without supervision of all time	None	Yes, but partial	Have academic records or certificates of maintenance or send the vehicles to repair at the authorized shop		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
Journey Management							
Risk and Routing Management							
4.1	Set up rest area and risk zone based on Route Hazard Analysis on all route or regulate safety driving procedures (in case contract owner has numerous clients and unable to assess hazard on all routes) and disseminate to driver for compliance	Assess documents and completeness (Consider number of routes and potential risk management)	No assessment	Conduct assessment but not 100% on all routes or no driver's self-assessment	Conduct 100% assessment on all routes with driver's self-assessment and signed by the assessor		
Route Hazard Assessment							
4.2	Lay down transport route and time and inform the driver before giving out order and commencing work	Review documents and inquire the driver about it. Route briefing is be for the order of new customer or first time driving to the area.	None	Yes, there is route hazard assessment but not properly	Yes, there is proper route hazard assessment		
4.3	The driver conducts the route assessment and request to add details in Route Hazard Analysis when there are any changes.	Assess work procedures and record the meeting	None		Yes		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
Journey Management							
4.4	Assign a person to oversee GPS activities, provide 24-hour monitoring or supervise through transport duration. Provide speaker and microphone for two-way communication	Assess whether GPS monitoring has been carried out onsite	None				
GPS Monitoring							
4.5	Set up alert system as required by the company or not 1. 4-hour long drive 2. Parking on the shoulders of roadways or no stopping hazard zone 3. Speeding over limit 4. Entering restricted driving zone	- Provide daily inspection records indicating the list of inspected items and results of any truck’s abnormalities. - Provide evidence of every warning given to the driver / Set up alert management as required by the company	None	Yes, but not monitored	Yes, completely complied		

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Subject	Evaluation Details	Procedures / Evaluation Measures	Score			Remark	Score
			Fail (1)/ require improvement	Fair (3)	Good (5)		
4.6	Perform random inspection of driver's behaviors or not / Conduct record and follow up on driver's behaviors improvement or not	<ul style="list-style-type: none"> - Provide monthly inspection records indicating the list of inspected items and results of any driver's misbehaviors - Provide evidence of every warning given to the driver / Set up alert management as required by the company 	None	Yes, but not monitored	Yes, completely complied		
Emergency Response							
Emergency Response Plan							
5.1	Provide manual for emergency management during transport that breaks down the steps to be taken and critical information for the driver to promptly and properly handle each incident. The drivers can understand instructions and operate. Emergency numbers are displayed on the side of the truck which are available 24 hours a day in case of emergency.	<ul style="list-style-type: none"> - The operator must provide telephone number for emergency alert and manual for emergency management - Provide emergency plan that covers all incidents such as an unconscious driver or scattered goods blocking the road, etc. - Interview the driver whether they clearly acknowledged the procedures. - Review the evidence and consider the precedent cases and proceed as actual circumstances may require 	No manual / No number / In progress	Have manual but no clarification or the driver has no understanding or obsolete contact phone numbers	Has manual and fully complied / Has updated contact numbers		

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			Fail (1)/ require improvement	Fair (3)	Good (5)		
5.2	Assign a person to oversee emergency response in case of the truck accident on the road. In case of hazardous or chemical substance truck, assemble the emergency response team	Assess the evidence on the vehicle and consider the precedent cases and proceed as actual circumstances may require	None, in progress	Yes, but not proper and can't be operated	Yes, and proper		
Emergency Response Drill							
5.3	Collaborate with contract owner to provide training and emergency response drill by stimulating the real incident, as well as an annual review at the minimum	Possess plan and result. If no plan being executed for the current year, consider the previous year's plan and result	None, in progress	Yes, but not complete	Yes, completely complied		

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Appendix 5. Criteria for evaluation and selection of the carriers

The selection of carriers must consider the safety capacity evaluation pursuant to the Carriers Evaluation Form with the following criteria and procedures:

Score	Evaluation Criteria
$\leq 80\%$	Eligible to be selected for services
$65\% \leq \text{score} < 80\%$	Eligible to be selected for services but require quality improvement of the activities with the scores lower than 80%
$50\% \leq \text{score} < 65\%$	Ineligible to be selected. Need quality improvement of the activities with the scores lower than 65%
$0\% \leq \text{score} < 50\%$	Ineligible to be selected. Wait until next re-evaluation

Appendix 6. Criteria for operation after annual audit of the carriers

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Score	Procedures
$\leq 80\%$	Eligible to continue using the service
$65\% \leq \text{score} < 80\%$	<ul style="list-style-type: none"> - Issue a warning letter for quality improvement of the activities with the scores lower than 80% within 2 months - If the quality can't be improved within 2 months, issue the 2nd warning letter for improvement it within 1 month - If there is no improvement, consider additional measures to be applied.
$50\% \leq \text{score} < 65\%$	<ul style="list-style-type: none"> - Issue a warning letter for quality improvement of the activities with the scores lower than 65% within 2 months - If the quality can't be improved within 2 months, issue the 2nd warning letter for improvement it within 1 month - If there is no improvement, consider additional measures to be applied.
$0\% \leq \text{score} < 50\%$	Reduce the work by 50% until the improvement of all activities with the scores lower than 65% or terminate the contract

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Appendix 7. Supporting documents required from the carriers before starting work

Driver

- 1) Copy of the driver's valid identification card
- 2) Copy of the driver's valid driving license
- 3) Application form of the driver
- 4) Health examination result of the driver
- 5) Driver's record of training in Safety Driving Course
- 6) Result of the driving aptitude test of the driver
- 7) Result of the knowledge test of traffic regulations and highway code of the driver

Truck

- 1) Truck registration manual
- 2) The carriers must provide the trucks for vehicle's required inspection by the contract owner before putting in service.

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Appendix 8. Penalty criteria for the carrier upon a breach of safety standards

1. Considering penalty for the carriers in case of the incident occurrence

Upon the occurrence of accident during transportation, the penalty will be considered basing on the severity level in accordance with the table provided below:

Incident's Severity	Fine per incident
Level 1	Conduct the report summarizing the cause and plan of actions (CA/PA)
Level 2	Issue a fine, based on the value determined by each business for each accident and Suspend the service for the period no longer than 6 months or until the service improvement completed
Level 3	Issue a fine, based on the value determined by each business for each accident and Suspend the service right away until the carrier comes up with effective prevention plan which has been approved by the Business Committee

2. Considering penalty for the carriers in case of violating Traffic Law and Life Saving Rules *

Level	Penalty for Individual (Carrier)	Penalty for Company
Level 1	Forbid the carriers to work with the company in accordance with the conditions of - 3 days, 7 days, permanently	Issue the letter requesting to comply with prevention measures and issue a fine (not exceeding 5,000 Baht)
Level 2	Forbid the carriers to work with the company in accordance with the conditions of - 7 days, permanently	Issue the letter requesting to comply with prevention measures and issue a fine (between 10,000-20,000 Baht)
Level 3	Forbid the carriers to work with the company in accordance with the conditions of - permanently	Issue the letter requesting to comply with prevention measures and issue a fine (not exceeding 20,000-50,000 Baht) and/or Suspend the service for the period no longer than 6 months

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3. Considering penalty for the carriers in case of violating Behavior Based Safety and considering penalty in case of the truck and its equipment are not in proper condition for work

Level	Penalty for Individual (Carrier)	Penalty for Company
Level 1	Issue the warning letter, in writing	Issue the letter requesting to comply with prevention measures and issue a fine (not exceeding 2,500 Baht)
Level 2	Forbid the carriers to work with the company (no longer than 3 months)	Issue the letter requesting to comply with prevention procedures and issue a fine (not exceeding 5,000 Baht)
Level 3	Forbid the carriers to work with the company (no longer than 6 months)	Issue the letter requesting to comply with prevention procedures and issue a fine (not exceeding 10,000 Baht)

Note: Contract owner will determine the Behavior-Based Safety such as engine cut out, chock blocks, key leaving in the ignition when not being in the vehicle.

For the penalty in levels 2 and 3, in case the same person acts in violation of the same mistakes, the consideration of penalty shall be elevated to the next level immediately. For instance,

- On August 10, 2018, the alcohol check on Mr. A found positive for alcohol use will be carried Level 1 penalty.
- On September 12, 2018, the alcohol check on Mr. A found positive again for alcohol use will be carried Level 2 penalty.
- On October 15, 2018, the alcohol check on Mr. A found positive again for alcohol use will be carried Level 3 penalty.

For the case that the same group of employees who are under employment contract with the carrier's company act in violation of the same mistakes, the consideration of penalty shall be based on the accumulated violation and be consecutively increased as per the following details:

- Level 1: an accumulation of 5 violation, the next violation will be increase to Level 2 penalty.
- Level 2: an accumulation of 5 violation, the next violation will be increase to Level 3 penalty.
- For the violations that have been elevated to Level 3 penalty, the next violation will be carried Level 3 penalty or considered the increase of penalty subject to the opinion of the Investigation Committee.

In case of repeated violation, the consideration of penalty shall be commenced from the latest level of penalty being considered. The increase in penalty level shall be determined by accumulated violation from the violation count of both penalty levels.

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The number of violations is accumulated within the calendar year (January 1 - December 31). The violation count will be reset and started over in the new calendar year.

If the investigation team considered that the consequences associated with the violation are highly serious, or the behavior has the tendency to cause the repeated violation, the investigation team can elevate the penalty level as they deem fit.

4. Considering penalty for the carriers in case of equipment/tools or GPS malfunction, camcorder failure or not turning-on and in case of inability to retrieve videos footage after the accident

Equipment/Tools	Penalty for Company
- equipment or GPS malfunction - camcorder failure or not turning-on	issue a fine not exceeding 1,000 Baht per time
- inability to retrieve videos footage after the accident	issue a fine not exceeding 20,000 Baht per time

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Appendix 9. Procedures and list of drivers' health check-up

1. Process pre-employment medical screening during job interview that the driver must have no medical conditions that could be the source of danger while driving and no diagnosis of 10 diseases that appear as nasty conforming to Sections 46 (4), (5), (6), and Sections 49 (6), (7) of the Vehicles Act B.E. 2522 (1979) and Medical Examination Procedures for Medical Certificate Issuance for driving license and driving license renewal applicants of the Department of Land Transport as described below:

- 1) Leprosy
- 2) Tuberculosis
- 3) Elephantiasis
- 4) Disease of addiction
- 5) Chronic diseases of toxic liquor
- 6) Psychoneurosis
- 7) Uncontrollable epileptic seizure
- 8) Brain surgery recipient
- 9) Diabetes with insulin injection
- 10) Myocardial infarction or bypass graft surgery recipient, or balloon angioplasty recipient

2. Provide check-up to screen the medical conditions that could be the source of danger while driving and unpleasant diseases previously mentioned in No. 1 as per the following list:

- 1) Body examination by the Doctor
- 2) Lung x-ray
- 3) Blood sugar level
- 4) Blood fat level
- 5) Complete blood count
- 6) Liver function tests
- 7) Renal function test
- 8) Urinalysis
- 9) Analysis of Narcotics in Urine
- 10) Visual Acuity
- 11) Audiogram
- 12) Lung function test

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3. Schedule the doctor to assess the driver's fitness for duty as well as interview for medical history taking. Medical examination as per the list mentioned in No. 2 will be considered to screen out the diseases stated in No. 1. The interview will further sort out 7 high-risk group diseases specified by the Driver and Vehicle Licensing Agency, the United Kingdom and Department of Transportation, the United States of America:
 - 1) Cardiovascular disease
 - 2) Vision and hearing
 - 3) Parkinson's disease
 - 4) Nervous and brain disease
 - 5) Under antidepressants or anti-drowsiness medication
 - 6) Musculoskeletal disorders
 - 7) Arterial hypertension
4. Enable the doctor to comment on the assessment of driver's fitness for driving and determine the driver's readiness to drive
5. Organize the health check-up to evaluate the driver's fitness for duty at least once a year

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Appendix 10. List of emergencies during transports by level of the incidents

Incidents	Level of Severity
1	Transportation Breakdown but the driver can repair within the limited time and continue to drive, such as flat tire, out of fuel, broken taillights
2	Transportation Breakdown and unable the driver to continue to drive, such as engine failure, propulsion system malfunction
3	Transportation Accidents such as car flipping upside down, crashing into people, or grazing by other car, resulting in property damage, injured or fatalities
4	Truck accident causing pallet leak, overturned truck with fallen and scattered products around the area, or truck plunging into the river
5	Truck accident and the driver lost consciousness or the truck stops moving for more than 20 minutes

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Appendix 11. Examples of the learning courses for the drivers

Item	Courses	Main Topics
1.	Safety Driving Course (SDC) with Refresher Training in theory every year	<ul style="list-style-type: none"> a. Attitude and awareness on safety driving b. Preparation of body and mind condition of the driver c. Preparation of vehicle for transport d. Defensive driving e. Evaluation, control, and resolving the abnormal situation and emergency f. Fatigue management g. Fuel efficient driving
2.	In-Cab Coaching	
3.	Practices in Industrial Factories	<ul style="list-style-type: none"> a. Life Saving Rules for factory works b. Traffic regulations in the factory
4.	Instructions in case of emergency during transportation	<ul style="list-style-type: none"> a. Definition of emergency b. Emergency response c. Emergency drill

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Appendix 12. Examples of Key Performance Indicators (KPI) of the carriers

Lagging KPI

- 1) Number of fatalities among of drivers, litigants, or third party
- 2) Number of transport accident that results in time away from work (Lost Time Incident: LTI or Day Away from Work Case: DAWC)
- 3) Number of truck accidents that the severity results in temporarily reassigned job functions (time Restricted Work Case: RWC) or requires basic medical treatment (Medical Treatment Case: MTC)
- 4) Number of accidents from goods transport that the severity requires first aid treatment (First Aid)
- 5) Number of incidents that occur and lead to the following damages:
 - a) goods
 - b) products leakage that have impacts on various aspects such as environment of communities

Leading KPI

- 1) Violation of Traffic Law
 - a) number of incidents that the driver does not take a 20-minute rest break for every 4-hour driving
 - b) number of incidents that the driver drives in the restricted area
 - c) number of speeding over limit
 - d) number of incidents of parking on the shoulders of roadway
- 2) Violation of "Life Saving Rules"
 - a) number of violations of "Life Saving Rules"
 - b) number of repeated violations
 - c) amount of violation fees
- 3) Behavior-Based Safety: BBS
 - a) number of hazardous behaviors which require the behavior assessment of the driver from dashcam record at least one time per person per month
 - b) number of unsafe behaviors of the drivers
- 4) Preparedness of Truck and Equipment
 - a) number of incidents that the truck or equipment are not well-prepared for operation
 - b) number of parking on the shoulders of roadways or emergency parking from unprepared truck and equipment