



HSE Hazard Identification, Risk Assessment and Risk Control Planning Management Procedure

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1 General Provisions

1.1 Purpose

To establish a scientific, systematic and continuous mechanism for Health, Safety and Environment (HSE) hazard identification, risk assessment and risk control planning; fully identify HSE hazards in the Company's material procurement, equipment supply, warehouse management, transportation logistics, inspection and testing, equipment maintenance, office operations and related management activities; scientifically evaluate risk levels; formulate targeted risk control measures; provide a basis for continuous improvement of HSE performance and formulation of HSE objectives and management plans; effectively prevent personal injuries, illnesses, property losses and environmental pollution incidents; and ensure the effective operation of the HSE management system. This procedure is formulated in accordance with the *Work Safety Law of the People's Republic of China*, *Regulations on the Safety Management of Hazardous Chemicals*, and the requirements of PIPING SYSTEM PTE LTD and COMPANY's HSE management systems.

1.2 Scope of Application

This procedure applies to all HSE hazard identification, risk assessment and risk control planning activities of Pipeline Materials and Equipment Co., Ltd. and its subordinate departments, branches and project departments (hereinafter collectively referred to as "all units"), covering:

1. Activity Types: Routine activities (daily procurement, warehouse patrol, office operations), non-routine activities (equipment overhaul, temporary operations, emergency drills), and potential emergency situations (fire, chemical leakage, traffic accidents);
2. Business Links: Procurement (supplier selection, material acceptance), warehousing (material storage, loading/unloading), transportation (vehicle scheduling, material escort), inspection (equipment testing, quality verification), equipment maintenance (equipment repair, maintenance), office management (document processing, meeting organization);
3. Relevant Parties: Company employees, suppliers, contractors (warehouse loading/unloading providers, carriers), customers, visitors, and surrounding communities;

4. Facilities and Premises: Buildings (office buildings, warehouses), equipment (forklifts, inspection instruments, transportation vehicles), tools, fire-fighting facilities, electrical facilities, and all workplaces including office areas, warehouse areas, yards, and transportation routes;
5. Management and Changes: Management factors such as lack of management systems, inappropriate operating procedures, and insufficient training, as well as new risks arising from changes in personnel, equipment, processes, materials, and regulations.

1.3 Referenced Documents

1. *Work Safety Law of the People's Republic of China*
2. *Environmental Protection Law of the People's Republic of China*
3. *Occupational Disease Prevention and Control Law of the People's Republic of China*
4. *Regulations on the Safety Management of Hazardous Chemicals*
5. *Classification and Codes for Hazards in Production Processes (GB/T 13861)*
6. *Classification Standard for Casualties of Enterprise Employees (GB 6441)*
7. *HSE Management System Requirements (Q/SY1002.1)*
8. *HSE Risk Assessment Technical Specifications*
9. *COMPANY HSE Hazard Identification and Risk Assessment Management Measures*
10. *Company HSE Risk Management Procedure*
11. *Company HSE Organization Setup and Responsibility Management Procedure*
12. *Company HSE Emergency Plan System*
13. *Company HSE Objectives, Targets and Management Plan Control Procedure*
14. *Company HSE Change Management Procedure*
15. *Company HSE Incident Management Procedure*
16. *Company Management Procedure for Identification, Acquisition and Compliance Evaluation of HSE Laws, Regulations and Other Requirements*

1.4 Terms and Definitions

1. Hazard: A source, state or behavior that may cause personal injury, illness, property loss, environmental damage, or a combination of these situations, classified into the following categories:
 - Health (H) Hazards: Physical factors (noise, radiation), chemical factors (toxic chemicals), biological factors (mold), ergonomic factors (poor posture), psychological factors (work pressure);
 - Safety (S) Hazards: Object strikes, vehicle injuries, mechanical injuries, hoisting injuries, electric shocks, fires, explosions, falls from heights, collapses, poisoning and suffocation, etc.;

- Environmental (E) Hazards: Atmospheric/water/soil emissions, energy waste, waste generation, ecological impacts, etc.;
 - Management Hazards: Lack of systems, insufficient training, inadequate supervision, etc.
1. Risk: The combination of the likelihood (L) and severity (S) of potential consequences caused by a hazard, with risk value calculated as $R = L \times S$.
 2. Risk Assessment: The process of evaluating the risk value of a hazard using qualitative or quantitative methods (e.g., risk matrix method) to determine the risk level.
 3. Risk Level: Divided into 3 levels based on risk value, corresponding to the original 4-level control requirements:
 - Major Risk (Red Zone): $R \geq 15$ ($L \geq 3$ and $S \geq 5$, or $L \geq 5$ and $S \geq 3$), which may cause death, major property loss or severe pollution and requires immediate control;
 - Medium Risk (Yellow Zone): $8 \leq R < 15$ ($L \geq 2$ and $S \geq 4$, or $L \geq 4$ and $S \geq 2$), which may cause serious injuries, significant losses or general pollution and requires control within a time limit;
 - Low Risk (Blue/Green Zone): $R < 8$ ($L \leq 2$ and $S \leq 3$), which may cause minor injuries, slight losses or no impact and can be managed through routine measures or is acceptable.
 1. Risk Control Planning: The process of formulating measures in accordance with the priority of "Elimination → Substitution → Engineering → Management → Personal Protective Equipment (PPE)" based on risk levels to reduce risks to an acceptable level.

2 Responsibility Assignment

2.1 Company Top Management

1. Approve the Company's list of major HSE risks and the overall risk control planning plan (e.g., hazardous material warehouse renovation project);
2. Provide resources (human resources, funds, technical equipment) required for hazard identification, risk assessment and risk control;
3. Approve the Company's annual HSE hazard identification and risk assessment plan.

2.2 Company Management Representative (HSE-in-Charge Leader)

1. Review the Company's HSE hazard identification list, risk assessment report and major risk control plan;
2. Coordinate cross-departmental disputes in hazard identification and assessment (e.g., risk ownership in the handover link between procurement and warehousing);
3. Supervise the implementation of this procedure and listen to risk control work reports quarterly.

2.3 Quality, Safety and Environmental Protection Department (HSE Centralized Management Department)

1. Act as the centralized management department for this procedure, responsible for the formulation, revision, interpretation and supervision of the procedure's implementation;
2. Formulate the Company's annual HSE hazard identification and risk assessment plan, clarifying the scope, methods and frequency for each department;
3. Organize company-level risk assessments (e.g., major risk review meetings), establish and maintain the *Company HSE Hazard Identification and Risk Assessment Ledger* and *List of Major HSE Risks*;
4. Uniformly train on hazard identification and risk assessment methods (e.g., JSA, HAZOP) and guide all departments in their work;
5. Supervise the implementation of risk control measures by all departments, conduct special inspections quarterly and verify control effectiveness;
6. Organize company-level risk reviews annually, update the risk ledger and control measures, and submit them to the Management Representative for review.

2.4 All Business and Functional Departments (Procurement Department, Logistics Department, etc.)

1. Organize comprehensive hazard identification within the business scope of the department (e.g., the Procurement Department identifies supplier qualification risks, and the Logistics Department identifies transportation vehicle risks);
2. Establish a departmental risk assessment team (including personnel from technical, operational and management positions), conduct department-level risk assessments, and fill in the *HSE Hazard Identification and Risk Assessment Ledger*;
3. Transmit the department's assessment results to the Quality, Safety and Environmental Protection Department and cooperate with company-level risk reviews;
4. Formulate and implement risk control measures for the department (e.g., the Procurement Department selects compliant suppliers, and the Logistics Department implements daily vehicle inspections);
5. Organize department employees to participate in hazard identification and risk assessment (e.g., team JSA analysis) and collect reports on new post risks monthly.

2.5 All Units (Branches, Project Departments)

1. Organize dynamic hazard identification at on-site operation locations (e.g., temporary warehouses, regional transportation) based on local conditions (e.g., local transportation control, extreme weather risks);
2. Conduct on-site risk assessments and formulate differentiated control measures (e.g., equipping oxygen supply equipment for transportation in plateau areas);
3. Submit the on-site risk ledger to the Quality, Safety and Environmental Protection Department monthly and accept risk control inspections quarterly;

4. Re-identify relevant risks and update measures within 48 hours after an on-site risk incident (e.g., material leakage) occurs.

2.6 Archives Management Department

1. Be responsible for archiving and managing risk-related records requiring long-term preservation (e.g., major risk assessment reports, control plan acceptance records) in accordance with the *Archives Management Measures*;
2. Assist the Quality, Safety and Environmental Protection Department in maintaining historical versions of the risk ledger to ensure traceability.

2.7 All Employees

1. Participate in hazard identification for their own posts (e.g., warehouse staff identify loose shelf screws, drivers identify tire wear);
2. Learn the post risk notification card (including risk level and control measures) and comply with risk control requirements;
3. Promptly report new risks or risk escalation to the team leader or department HSE administrator;
4. Participate in post JSA analysis and risk review meetings, and put forward suggestions for improving control measures.

3 Work Procedures

3.1 HSE Hazard Identification

3.1.1 Scope and Content of Identification

1. Full-Dimension Coverage:
 - Activity Dimension: Routine activities (procurement acceptance, warehouse patrol), non-routine activities (equipment overhaul, emergency drills), emergency situations (fire, leakage);
 - Personnel Dimension: Employee operations, contractor work, visitor activities, supplier transportation;
 - Facility Dimension: Equipment (forklifts, inspection instruments), vehicles (transportation trucks, official vehicles), buildings (warehouses, office buildings), fire-fighting/electrical facilities;
 - Management Dimension: System compliance, training effectiveness, supervision frequency, change management;
 - Environmental Dimension: Atmospheric emissions (transportation exhaust), water emissions (warehouse rainwater), soil pollution (chemical leakage), energy consumption (warehouse lighting).
1. Category-Specific Details:

Category	Specific Content
Health Hazards	Noise (forklift operation \geq 85dB), radiation (flaw detectors), dust (material unpacking), poor posture (shelf goods retrieval), work pressure (peak-season overtime)
Safety Hazards	Vehicle injuries (forklift collisions), mechanical injuries (gear pinching), fires (spontaneous combustion of flammable materials), electric shocks (electrical short circuits), falls from heights (shelf maintenance)
Environmental Hazards	Diesel leakage (transportation vehicles), waste oil disposal (equipment maintenance), packaging waste (procured materials), excessive noise (warehouse loading/unloading)
Management Hazards	Unlicensed operation of special operations, outdated operating procedures, insufficient risk patrol frequency, unassessed changes (introduction of new equipment)

3.1.2 Identification Methods and Tools

Select one or a combination of the following methods based on business characteristics:

Method Category	Specific Method	Applicable Scenarios	Operation Tools/Outputs
Basic Analysis	Interview and Communication	Preliminary identification with full participation (e.g., team meeting discussions)	Post Risk List
	On-Site Observation	Dynamic operations (transportation loading/unloading, equipment maintenance)	On-site photos, observation records
	Safety Checklist (SCL)	Fixed facilities/premises (warehouses, inspection rooms)	<i>Safety Checklist</i> (including inspection items and standards)
Systematic Analysis	Job Safety Analysis (JSA/JHA)	Operation processes (procurement acceptance → warehouse storage → transportation delivery)	<i>JSA Record Form</i> (steps - risks - measures)
	Hazard and Operability Analysis (HAZOP)	Complex processes (equipment testing, hazardous material storage)	HAZOP Analysis Report
	Failure Mode and Effects Analysis (FMEA)	Critical equipment (forklifts, transportation vehicles)	FMEA Analysis Form (failure modes - impact levels)
Experience-Based Analysis	Accident Case Comparison	High-risk links (warehouse fires, transportation accidents)	Industry Accident Case Comparison Table
	Regulation and Standard Comparison	Compliance identification (hazardous chemical	Regulation Compliance Checklist

		management, occupational health)	
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3.1.3 Timing and Frequency of Identification

1. Three-Level Identification Timing:

- Initial Identification: Conduct comprehensive company-wide identification when the HSE management system is established/revised (once per system update);
- Regular Identification: Conduct systematic company-wide identification once a year (usually in Q4, completed in January of the following year), and partial identification by each department once a quarter;
- Dynamic Identification: Initiate special identification within 48 hours when the following situations occur:
 - Before, during and after the construction of new/renovated/expanded projects (e.g., new warehouse construction);
 - Introduction of new equipment (automated warehouse systems), new materials (new types of chemicals), new processes (equipment testing technologies);
 - Updates to laws, regulations/standards (e.g., revision of *Rules for the Transportation of Dangerous Goods*);
 - Occurrence of HSE incidents (minor injuries or above, property losses \geq RMB 10,000) or identification of major non-conformities in audits;
 - Organizational structure adjustments (department mergers), business scope expansion (addition of overseas procurement);
 - Complaints from relevant parties (community noise complaints), rectification requirements from external inspections.

1. Identification Requirements:

- Full Participation: Each post shall participate in at least one identification activity (e.g., JSA analysis, SCL inspection);
- Complete Records: Fill in the *HSE Hazard Identification Record Form*, indicating the identification time, personnel, method, risk description and potential consequences;
- Cross-Verification: Conduct cross-department/post review of identification results (e.g., mutual review of handover link risks between the Procurement Department and Warehouse Center).

3.2 Risk Assessment

3.2.1 Assessment Method: Risk Matrix Method

Unified quantitative assessment using "Likelihood (L) \times Severity (S)", where both L and S are classified into 5 levels:

1. Likelihood (L) Determination (based on the effectiveness of existing control measures):

Level	Determination Criteria	Example (Warehouse Link)
5 (Extremely High)	Occurs \geq 1 time per week or historically \geq 3 times per year; control measures are ineffective	Forklifts not inspected regularly, brake failures occur once a week
4 (High)	Occurs \geq 1 time per month or historically 1-2 times per year; control measures are partially ineffective	Reminders exist for excessive material stacking but no intervention
3 (Medium)	Occurs \geq 1 time per quarter or historically 1 time per year; control measures are basically effective	Loose shelf screws found once a quarter
2 (Low)	Occurs \geq 1 time per year or no historical records but potential; control measures are effective	New employees unfamiliar with warehouse operations but with training
1 (Extremely Low)	Occurs \leq 1 time every 3 years or almost impossible; control measures are comprehensive	Warehouse earthquake risk, with seismic intensity \leq 6 degrees in the area

1. Severity (S) Determination (comprehensive impact on personnel, property, environment and compliance):

Level	Personal Injury	Property Loss	Environmental Impact	Compliance Impact
5 (Catastrophic)	Death / \geq 3 serious injuries	\geq RMB 1,000,000	Severe pollution (exceeding standards by 10x)	Violation of laws leading to penalties

4 (Major)	1-2 serious injuries / ≥ 3 minor injuries	RMB 100,000 - 1,000,000	General pollution (exceeding standards by 3-10x)	Violation of rules leading to warnings
3 (Significant)	1-2 minor injuries	RMB 10,000 - 100,000	Minor pollution (exceeding standards by $< 3x$)	Non-compliance with internal systems
2 (Moderate)	Minor scratches / occupational disease observation period	RMB 1,000 - 10,000	No pollution but waste	Need for management process optimization
1 (Minor)	No injury	$<$ RMB 1,000	No impact	Fully compliant

1. Risk Value Calculation and Level Determination:

- Risk value $R = L \times S$, divided into 3 levels based on R value with corresponding control requirements:

Risk Level	R Value Range	Color Code	Control Requirements
Major Risk	$R \geq 15$	Red Zone	Immediately formulate a special plan, approved by the Top Management
Medium Risk	$8 \leq R < 15$	Yellow Zone	Formulate a plan within 1 month, approved by the Department Head
Low Risk	$R < 8$	Blue/Green Zone	Incorporate into daily management, verify quarterly

3.2.2 Assessment Implementation Process

1. Departmental Preliminary Assessment (completed within 15 working days):

- Establish an assessment team: The department head serves as the team leader, with members including technical, operational and HSE personnel (at least 3 people);

- Collect identification results: Summarize the *HSE Hazard Identification Record Form* and supplement descriptions of existing control measures (e.g., "daily forklift inspections");
 - Calculate risk values: Score according to the L and S determination criteria, and fill in the *HSE Hazard Identification and Risk Assessment Ledger* (including risk name, L, S, R, level, existing measures);
 - Departmental public notice: Publicize the preliminary assessment results within the department for 3 working days, collect employee feedback and revise accordingly.
1. Company-Level Review (completed within 10 working days):
 - The Quality, Safety and Environmental Protection Department collects the preliminary assessment ledgers from all departments and screens risks with $R \geq 8$ (medium and above);
 - Organize cross-departmental review meetings (inviting representatives from the Procurement, Logistics, Warehousing and Engineering Technology Departments) and conduct on-site verification of high-risk links (e.g., warehouse fire risks);
 - Adjust risk values: Re-score controversial risks (e.g., "hazardous material transportation leakage") to determine the final level.
 1. Major Risk Validation (completed within 5 working days):
 - The Quality, Safety and Environmental Protection Department compiles the *List of Major HSE Risks* ($R \geq 15$) with attached risk assessment reports;
 - Submit to the Management Representative for review and the Top Management for approval, and release the company-level major risk control list.

3.3 Risk Control Planning

3.3.1 Control Principles and Priority

Strictly follow the priority of "Elimination → Substitution → Engineering → Management → Personal Protective Equipment (PPE)", supplemented by emergency measures:

1. Risk Elimination: Discontinue high-risk activities (e.g., stop procurement of equipment accessories without safety certification);
2. Risk Substitution: Replace with low-risk alternatives (e.g., use non-flammable packaging instead of wooden box packaging, electric forklifts instead of diesel forklifts);
3. Engineering Control: Technical measures to isolate/reduce risks (e.g., install automatic fire-extinguishing systems in warehouses, add collision warning devices to forklifts);
4. Management Control: Systems/training/supervision (e.g., driver shift system, licensed operation of special operations, daily risk patrols);
5. Personal Protective Equipment (PPE): Last line of defense (e.g., warehouse staff wear safety helmets and goggles, transportation drivers fasten seat belts);
6. Emergency Supplementary Measures: Formulate emergency plans (e.g., emergency disposal for hazardous material leakage, fire evacuation plans).

3.3.2 Formulation of Hierarchical Control Measures

Formulate differentiated measures based on risk levels, clarifying responsibilities, time limits and verification methods:

1. Major Risk (Red Zone) Control:

- Responsible Departments: Leading department (e.g., Warehouse Center) + supporting departments (Quality, Safety and Environmental Protection Department, Engineering Technology Department);
- Measure Requirements: Formulate a *Special Risk Control Plan*, including technical plans (e.g., warehouse explosion-proof renovation), implementation schedules (phased progress), and resource requirements (funds, personnel);
- Approval Process: Compiled by the department head → reviewed by the Quality, Safety and Environmental Protection Department → reviewed by the Management Representative → approved by the Top Management;
- Implementation Time Limit: Initiated within 1 month after approval, completed within 3 months (maximum 6 months for special projects);
- Effectiveness Verification: Conduct on-site tests (e.g., fire drills) after completion; the risk value must be reduced to $R < 8$ for closure.

1. Medium Risk (Yellow Zone) Control:

- Responsible Department: Business supervision department (e.g., Logistics and Transportation Department);
- Measure Requirements: Fill in the *Risk Control Plan Form*, clarifying specific measures (e.g., "complete GPS installation on transportation vehicles within 1 month"), responsible persons and completion time limits;
- Approval Process: Approved by the department head → filed with the Quality, Safety and Environmental Protection Department;
- Implementation Time Limit: Completed within 2 months, with progress reported monthly;
- Effectiveness Verification: Conduct self-inspection after completion (e.g., check GPS online rate $\geq 95\%$), with quarterly spot checks by the Quality, Safety and Environmental Protection Department.

1. Low Risk (Blue/Green Zone) Control:

- Responsible Department: Post/team;
- Measure Requirements: Incorporate into daily management (e.g., maximum 3 layers for limited-height stacking of warehouse materials, daily inspection of office area sockets);
- Implementation Method: Executed by post employees, with daily supervision by team leaders;
- Effectiveness Verification: Conduct quarterly verification by the department (e.g., compliance rate of material stacking $\geq 98\%$); continue control if the risk value does not escalate.

3.3.3 Review of Control Measures

Conduct a review of measures before implementation to avoid new risks; review content includes:

1. Effectiveness: Whether the measures can reduce the risk to the target level (e.g., whether the "automatic fire-extinguishing system" can reduce the fire risk from $R = 20$ to $R = 5$);
2. Feasibility: Technically achievable (e.g., whether the warehouse load can support the automatic fire-extinguishing system), economically reasonable (investment \leq estimated risk loss);
3. No Derived Risks: Measures do not introduce new hazards (e.g., whether the "forklift collision warning device" interferes with other equipment);
4. Compliance: Compliance with laws/standards (e.g., fire-fighting systems comply with GB 50016);
5. Review Records: Fill in the *Risk Control Measure Review Record*, with signatures of participating reviewers as the basis for measure implementation.

3.3.4 Emergency Control Measures

Formulate emergency measures for medium and above risks simultaneously, incorporating them into the Company's emergency plan system:

1. Develop Special Plans: Formulate special emergency plans for major risks (e.g., "hazardous material leakage"), and on-site disposal plans for medium risks (e.g., "forklift collision");
2. Clarify Emergency Elements: Organizational structure (commander-in-chief, emergency rescue team, evacuation team, medical team), emergency materials (fire extinguishers, chemical protective clothing, first-aid kits), response procedures (alarm \rightarrow disposal \rightarrow evacuation \rightarrow follow-up);
3. Regular Drills: Conduct emergency drills for major risks twice a year and for medium risks once a year; fill in the *Emergency Drill Record* after drills and optimize plans (e.g., adjust evacuation routes).

3.4 Dynamic Risk Management and Update

3.4.1 Regular Review and Update

1. Department-Level Update: Conduct risk reviews at the end of each quarter, update the *Departmental HSE Hazard Identification and Risk Assessment Ledger*, re-assess risks with $R \geq 8$, and report to the Quality, Safety and Environmental Protection Department;
2. Company-Level Update: Organize company-wide risk reviews in December each year, invite external experts (e.g., safety assessment institutions) to participate, update the *Company HSE Hazard Identification and Risk Assessment Ledger* and *List of Major HSE Risks*, and release them in January of the following year;
3. Review Inputs: Quarterly/annual HSE performance data (accident rate, hidden hazard rectification rate), regulatory updates, feedback from relevant parties, and audit findings.

3.4.2 Trigger Conditions for Dynamic Updates

The responsible department shall initiate risk updates within 48 hours when the following situations occur:

1. Risk Incident Trigger: Occurrence of HSE incidents (minor injuries or above, property losses \geq RMB 10,000), re-identify risks associated with the incident;
2. Change Trigger: Introduction of new equipment/processes (e.g., automated warehouse systems), adjustment of business scope (addition of LNG equipment procurement);
3. External Trigger: Updates to government supervision requirements (e.g., new regulations on hazardous material transportation), escalation of community complaints (excessive noise);
4. Internal Trigger: Identification of ineffective control measures in audits (e.g., failure of forklift collision warning devices), employee feedback on risk escalation.

3.4.3 Verification and Assessment of Control Effectiveness

1. Verification Methods:

- On-Site Verification: The Quality, Safety and Environmental Protection Department conducts quarterly spot checks on the implementation of high-risk measures (e.g., check transportation vehicle GPS data, warehouse fire-fighting facilities);
- Data Statistics: Analyze risk-related indicators (e.g., "number of driver fatigue driving incidents", "number of warehouse fire hazards");
- Employee Interviews: Understand the implementation of post risk control (e.g., whether forklift operators follow operating procedures).

1. Assessment Mechanism:

- Incorporate risk control effectiveness into department/individual HSE performance assessments (weight \geq 15%); deduct performance scores for failure to control major risks on schedule;
- Reward departments (e.g., 50% reduction in risk value) and individuals (proposing effective improvement suggestions) with excellent control effectiveness (bonuses, certificates of honor);
- Hold accountable those who fail to implement control measures leading to risk escalation (e.g., R increases from 10 to 20) in accordance with the *HSE Rewards and Punishments Regulations*.

3.5 Records and Archiving

1. Process Records: All departments collect the *HSE Hazard Identification Record Form*, *JSA Record Form*, and *Risk Control Measure Review Record*, and organize and archive them monthly;
2. Ledger Updates: The Quality, Safety and Environmental Protection Department updates the *Company HSE Hazard Identification and Risk Assessment Ledger* quarterly and the *List of Major HSE Risks* annually;

3. Archiving Requirements: Paper records are stored in the Archives Management Department (retained for 5 years), and electronic records are uploaded to the HSE management system (permanently backed up);
4. Access Permissions: Internal employees may access departmental records with their employee IDs; external entities (e.g., government supervision agencies) require approval from the Management Representative.

4 Relevant Documents and Records

4.1 Relevant Documents

1. *HSE Risk Management Procedure*
2. *HSE Objectives, Targets and Management Plan Control Procedure*
3. *HSE Change Management Procedure*
4. *HSE Incident Management Procedure*
5. *HSE Performance Measurement and Monitoring Management Procedure*
6. *Management Procedure for Identification, Acquisition and Compliance Evaluation of HSE Laws, Regulations and Other Requirements*
7. *Supplier HSE Management Measures*
8. *Contractor HSE Management Measures*
9. *HSE Emergency Plan System*

4.2 Record List

Record No.	Record Name	Filling Department	Storage Department	Retention Period
HSE-JL-001	<i>HSE Hazard Identification Record Form</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years
HSE-JL-002	<i>Job Safety Analysis (JSA) Record Form</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years

HSE-JL-003	<i>Safety Checklist (SCL)</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years
HSE-JL-004	<i>Company HSE Hazard Identification and Risk Assessment Ledger</i>	Quality, Safety and Environmental Protection Department	Quality, Safety and Environmental Protection Department	Long-term
HSE-JL-005	<i>List of Major HSE Risks</i>	Quality, Safety and Environmental Protection Department	Quality, Safety and Environmental Protection Department	Long-term
HSE-JL-006	<i>Risk Control Measure Review Record</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years
HSE-JL-007	<i>Special Risk Control Plan</i>	Leading departments	Quality, Safety and Environmental Protection Department	5 years
HSE-JL-008	<i>Risk Control Measure Implementation and Acceptance Record</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years
HSE-JL-009	<i>Emergency Drill Record</i>	All departments/units	Quality, Safety and Environmental Protection Department	3 years

5 Appendix

Appendix A Risk Matrix Chart (L×S Risk Value Corresponding Table)

Appendix B Criteria Table for Likelihood (L)/Severity (S) Determination

Appendix C HSE Hazard Classification Table (Health/Safety/Environment/Management)

Appendix D Operation Guide for Common Identification Methods (JSA/HAZOP/SCL)

Appendix E Template of *Company HSE Hazard Identification and Risk Assessment Ledger*

Appendix F Template for Compiling Major Risk Control Plans