



HSE Procurement Management Procedure

Document No.: CLADDING-HSE-OC-11

1 Purpose

To standardize the Health, Safety and Environment (HSE) management throughout the entire procurement process of materials/equipment of the Company, identify HSE risks in links including procurement planning, requisition submission, supplier selection, contract signing, material delivery, inspection and warehousing, storage and preservation, and usage; establish a closed-loop mechanism of "pre-review, in-process control, post-verification and feedback"; ensure that procured materials comply with national/industry HSE standards and that the supply and usage processes are safe and controllable; prevent safety accidents, environmental pollution and compliance issues caused by procurement links; safeguard employees' life safety, the integrity of Company assets and ecological environment safety; and meet the requirements of *PIPING SYSTEM PTE LTD HSE Management Specifications for Procurement Business*, *COMPANY HSE Control Requirements for Material Procurement* and relevant laws and regulations. This procedure is hereby formulated.

2 Scope of Application

This procedure applies to all procurement-related departments of the Company (Procurement Department, Requisition Department, Engineering Technology Department, Equipment Department, Warehousing Center, HSE Management Department, etc.) and all personnel involved in procurement business, covering the following procurement scopes:

2.1 Procurement Types

- Material Procurement: Core pipeline equipment, auxiliary equipment, hazardous chemicals, labor protection equipment, office supplies, etc.;
- Equipment Procurement: Special equipment such as hoisting machinery, transportation vehicles, and warehousing equipment;
- Service Procurement: Supporting services such as equipment inspection, installation and commissioning, and material transportation.

2.2 Entire Procurement Process

Including HSE review of procurement planning and formulation, requisition submission, HSE compliance review of suppliers, preparation of bidding documents, contract signing, material transportation/packaging control, arrival inspection, storage and preservation, usage monitoring, and HSE performance feedback.

3 Terms and Definitions

3.1 HSE Procurement

A procurement model that integrates HSE requirements throughout the entire procurement process, prioritizes suppliers with excellent HSE performance, ensures the compliance of procured materials, and controls risks in the supply and usage processes.

3.2 HSE Review of Procurement Requisition

The process in which the requisition department evaluates the HSE characteristics (safety, environmental friendliness, storage and usage requirements) of materials when submitting procurement plans, and clarifies the HSE technical standards for procured materials.

3.3 HSE-Qualified Materials

Procured materials that comply with national/industry HSE standards and the Company's HSE management requirements, and are accompanied by complete safety technical documents (such as Material Safety Data Sheets (MSDS), certificates of conformity, and inspection reports).

3.4 HSE Risk Points in Procurement

Links in the procurement process that may trigger HSE accidents (e.g., leakage during transportation of hazardous materials, lack of safety certification for special equipment, invalidation of suppliers' HSE qualifications, improper storage classification).

3.5 HSE-Specific Acceptance of Materials

The process of conducting special testing and verification on safety performance, environmental indicators, and occupational health impacts of important materials/equipment (special equipment, hazardous chemicals).

4 Responsibility Assignment

4.1 Procurement Department (Lead Department for Procurement Business)

- Take the lead in conducting HSE management throughout the entire procurement process and implement the requirements of this procedure;

- Organize HSE qualification review and on-site surveys of suppliers (linking to *HSE Management Procedure for Suppliers and Contractors*), and prioritize Grade A suppliers;
- Prepare bidding documents and clarify HSE requirements, stipulate HSE clauses in procurement contracts, and track their implementation;
- Establish HSE archives for qualified suppliers and HSE ledgers for procurement business, and record material acceptance results and suppliers' HSE performance;
- Collect HSE performance information of procured materials feedback from user departments, and use it as a reference for subsequent procurement.

4.2 HSE Management Department (Centralized Supervision Department, also known as Quality, Safety and Environmental Protection Department)

- Formulate and revise this procedure, and organize HSE training for procurement business (e.g., control of hazardous materials, interpretation of MSDS);
- Participate in HSE review of important procurement plans, identify HSE risks throughout the entire process and formulate control measures;
- Supervise the compliance of HSE clauses in procurement contracts, and participate in HSE-specific acceptance of hazardous materials and special equipment;
- Investigate HSE incidents caused by procurement links, analyze causes and put forward improvement suggestions;
- Regularly inspect the implementation of HSE management in procurement business and evaluate the effectiveness of the procedure.

4.3 Requisition Department (Material User/Application Department)

- Clarify HSE technical requirements (e.g., explosion-proof grade, environmental indicators) when submitting procurement requisitions, and provide risk information of usage scenarios;
- Participate in HSE capability evaluation of suppliers for important materials and HSE compliance verification of materials;
- Be responsible for HSE management of procured materials during usage (inspection before use, in-process monitoring) and feedback HSE performance;
- Report HSE hazards during usage and submit them to the HSE Management Department.

4.4 Engineering Technology Department

- Be responsible for proposing technical standards and HSE requirements for equipment and materials (e.g., safety protection devices for equipment, environmental emission indicators);
- Participate in HSE technical review of important equipment procurement and review of HSE clauses in bidding documents;

- Be responsible for technical acceptance of procured equipment and verify indicators such as safety performance and energy efficiency grade;
- Provide HSE technical support for equipment operation and maintenance, and formulate specific HSE technical requirements.

4.5 Equipment Department

- Be responsible for HSE technical review of procurement of special equipment (hoisting machinery, transportation vehicles), and clarify safety performance indicators (braking systems, limiting devices);
- Track the compliance of registration and inspection of procured special equipment to ensure compliance with the *Special Equipment Safety Law*;
- Participate in HSE-specific acceptance of special equipment and conduct function tests of safety devices.

4.6 Warehousing Center

- Be responsible for HSE acceptance of arriving materials (packaging, labeling, completeness of documents), and refuse storage of unqualified materials;
- Store materials in accordance with HSE requirements (classified storage of hazardous chemicals, temperature and humidity control), and be equipped with fire-fighting and emergency facilities;
- Regularly inspect the status of stored materials, record deterioration and invalidation, and feedback to the Procurement Department;
- Establish HSE ledgers for material preservation to ensure traceability.

4.7 Management

- Company Top Management / Management Representative: Approve important HSE management policies for procurement, and provide resource support;
- Procurement-In-Charge Leader: Approve HSE review results of major procurement projects (contract amount \geq RMB 5 million) and bidding documents;
- Head of Procurement Department: Approve HSE clauses of general procurement projects and review results of suppliers' HSE compliance review;
- Head of Requisition Department: Approve HSE review forms for procurement requisitions of the department and confirm HSE technical requirements for materials.

4.8 Personnel Involved in Procurement Business

- Implement HSE requirements throughout the entire procurement process and refuse procurement of HSE-unqualified materials;
- Promptly report HSE hazards identified in procurement links (e.g., invalidation of suppliers' qualifications, incomplete material labeling);

- Participate in HSE training for procurement and master key control points for procurement of hazardous materials and special equipment.

5 Management Procedures

5.1 HSE Management in Procurement Planning Phase

5.1.1 Submission of Procurement Requisition

When filling out the *Procurement Requisition Form* (Appendix A), the requisition department shall simultaneously submit the *Procurement Requisition HSE Review Form* (Appendix B), clarifying:

- Material name, specification model, quantity and usage scenario;
- HSE technical requirements (safety performance indicators, environmental indicators, occupational health protection requirements);
- Relevant laws, regulations and standards (e.g., GB 15577 *Safety Code for Dust Explosion Prevention*);
- Special HSE requirements for packaging, transportation and storage.

5.1.2 Formulation of HSE Technical Requirements

For important materials/equipment (special equipment, hazardous chemicals), the Engineering Technology Department takes the lead in formulating specific HSE technical requirements:

- Mechanical Equipment: Integrity of safety protection devices, reliability of emergency stop devices, noise/vibration limits;
- Electrical Equipment: Insulation performance, protection grade, explosion-proof grade (if required);
- Chemicals: Complete MSDS, toxicity limits, environmental emission requirements;
- Labor Protection Equipment: Protection performance standards, certification requirements (e.g., LA certification).

5.1.3 Procurement Plan Review

1. The head of the requisition department reviews the procurement requisition and HSE review form to confirm rationality (1 working day);
2. The Engineering Technology Department reviews the feasibility of HSE technical requirements (2 working days);
3. The HSE Management Department participates in the review of important procurement plans, evaluates HSE risk levels and determines control measures (2 working days);
4. Approval: General procurement (< RMB 5 million) is approved by the head of the Procurement Department; major procurement (≥ RMB 5 million) is approved by the procurement-in-charge leader;

5. Only procurement plans that pass the review can enter the supplier selection phase; those that fail shall be supplemented and improved.

5.2 HSE Management in Supplier Selection Phase

5.2.1 HSE Qualification Requirements for Suppliers

Suppliers shall provide the following qualification documents for written review by the Procurement Department:

- Valid business license, industry permits (e.g., hazardous material production/operation permits, special equipment manufacturing permits);
- HSE management system certification certificates (ISO 45001/ISO 14001), quality management system certification certificates;
- Product safety certification certificates (e.g., explosion-proof certification, environmental certification);
- Certificates of no major HSE accidents in the past 3 years (issued by local emergency management departments or industry associations);
- Qualification certificates of special operation personnel (if involving special equipment installation).

5.2.2 HSE Capability Evaluation of Suppliers

The Procurement Department, together with the HSE Management Department and the Requisition Department, conducts evaluation and fills out the *Supplier HSE Capability Assessment Form* (Appendix C):

- Operation status of HSE management system (completeness of systems, emergency drill records);
- Product quality and safety control capabilities (inspection processes, records of non-conforming product disposal);
- After-sales service capabilities (technical support, fault response time);
- Operation status of environmental protection facilities (certificates of up-to-standard wastewater/exhaust treatment).

5.2.3 On-Site Survey of Suppliers

For suppliers of important materials/equipment (e.g., special equipment, hazardous chemicals), the Procurement Department takes the lead in conducting on-site surveys:

- HSE management of production sites (safety warning signs, configuration of protection facilities);
- Safety and reliability of production processes (whether there are high-risk links);
- Occupational health protection for employees (wearing of personal protective equipment, occupational health examination records);
- Effectiveness of quality control systems (calibration records of inspection equipment, pass rate of product sampling inspection);

- Emergency resource reserves (fire-fighting equipment, leakage treatment materials).

5.2.4 Application of Evaluation Results

- Qualified: Included in the list of qualified suppliers and given priority to participate in procurement bidding;
- Pending Rectification: Suppliers shall submit rectification plans within 1 month and can be shortlisted only after verification of qualification;
- Unqualified: Shall not participate in the Company's procurement projects within 6 months.

5.3 HSE Management in Procurement Implementation Phase

5.3.1 HSE Requirements in Bidding Documents

When preparing bidding documents, the Procurement Department shall clarify the following HSE contents:

- Detailed HSE technical specifications (e.g., equipment safety performance indicators, chemical purity and toxicity limits);
- Relevant laws, regulations and standards (e.g., *Regulations on the Safety Management of Hazardous Chemicals*);
- HSE acceptance standards and methods (inspection items, criteria for qualification determination);
- HSE performance guarantees (e.g., equipment trouble-free operation time, commitment to environmentally friendly emissions of chemicals);
- HSE liability for breach of contract (e.g., payment of liquidated damages of 3%-5% of the contract amount if standards are not met).

5.3.2 HSE Review in Bidding Evaluation Process

1. Establish a bidding evaluation team, including representatives from the HSE Management Department;
2. Review contents: HSE compliance of bid products, suppliers' HSE management capabilities, HSE risk control measures;
3. The weight of HSE review shall not be less than 20%, serving as an important factor in bidding evaluation;
4. Issue the *Procurement Bidding Evaluation HSE Review Report* (Appendix D); bid documents that fail HSE review shall be rejected.

5.3.3 HSE Clauses in Procurement Contracts

Procurement contracts shall include the following HSE clauses, which shall be reviewed by the HSE Management Department:

- HSE technical requirements and implementation standards (referencing specific HSE technical requirements);

- Acceptance standards and procedures (including HSE-specific acceptance);
- Division of HSE responsibilities between both parties (suppliers are responsible for product quality and safety; the Company is responsible for storage and usage after receipt);
- After-sales service requirements (e.g., regular equipment maintenance, MSDS updates);
- Training requirements (suppliers shall provide HSE training for equipment operation);
- Liability for breach of contract (compensation for HSE accidents, responsibility for rectification if standards are not met).

5.4 Material Delivery and HSE Control

5.4.1 Control of Transportation Links

1. Selection of Transporters:

- Hazardous Materials: Select transporters with *Road Hazardous Goods Transportation Permits*, and verify vehicle annual inspection reports and drivers' qualification certificates;
- Special Equipment: Select transporters with oversize transportation qualifications, and formulate HSE risk assessment reports for transportation routes (avoiding bridge weight limits and curve risks);

2. Transportation Process Tracking:

- The Procurement Department designates special personnel for tracking; real-time GPS positioning shall be shared for transportation of hazardous materials;
- Transporters shall provide daily feedback on HSE conditions during transportation (vehicle status, material protection), and report abnormalities within 1 hour;

3. Emergency Preparation:

- Transporters shall formulate emergency disposal plans for leakage and fire, and be equipped with fire extinguishers, absorbent cotton and other materials;
- Clarify emergency contacts to ensure rapid linkage in case of sudden HSE incidents.

5.4.2 Control of Packaging Links

1. Suppliers shall package materials in accordance with contract agreements:

- Hazardous Materials: Leak-proof and anti-collision packaging, with GB 190 *Packaging Marks for Dangerous Goods* affixed, indicating material name, hazard category and emergency contact number;
- Special Equipment: Separate protection for key parts (precision instruments, transmission systems) to prevent damage during transportation;
- General Materials: Environmentally friendly and recyclable packaging, avoiding toxic and harmful materials;

2. The Procurement Department shall conduct random video or on-site inspections of packaging compliance before shipment; unqualified packaging shall be required to be repackaged.

5.5 Arrival Inspection and HSE Testing

5.5.1 Arrival Inspection (Routine Inspection)

The Warehousing Center takes the lead in inspection and fills out the *Procured Material Arrival Inspection Form* (Appendix E):

1. Document Verification: Product certificates of conformity, HSE inspection reports, MSDS (for chemicals), special equipment manufacturing permits;
2. Appearance and Label Inspection: Integrity of packaging, clarity of safety warning labels, completeness of nameplates (for special equipment);
3. Quantity and Specification Verification: Confirm consistency with the contract;
4. Result Handling: Materials with incomplete documents or unqualified appearance shall be suspended from acceptance; the Procurement Department shall be notified to coordinate with suppliers for supplementation/rectification.

5.5.2 HSE-Specific Acceptance (Important Materials)

For special equipment, hazardous chemicals, etc., the HSE Management Department, together with the Engineering Technology Department and the Equipment Department, conducts HSE-specific acceptance:

1. Safety Performance Testing:
 - Special Equipment: No-load operation testing, function verification of safety devices (safety valves, limit switches);
 - Chemicals: Component sampling testing, confirmation of consistency with MSDS, toxicity/corrosiveness testing;
2. Environmental Indicator Testing: Testing of equipment exhaust/wastewater emissions, evaluation of environmental degradability of chemicals;
3. Occupational Health Indicator Testing: Testing of equipment noise/vibration, testing of volatile organic compounds (VOCs) in chemicals;
4. Fill out the *Procured Material HSE-Specific Acceptance Report* (Appendix F); the Procurement Department shall notify suppliers to return or replace unqualified materials.

5.5.3 Handling of Acceptance Issues

1. Record HSE non-conformities (e.g., safety device failures, missing MSDS) and issue the *HSE Acceptance Non-Conformity Notice* (Appendix G);
2. The Procurement Department tracks supplier rectification; major issues (e.g., substandard safety performance of special equipment) may result in refusal of acceptance;
3. Re-acceptance shall be conducted after rectification is completed; acceptance records shall be included in the procurement HSE ledger.

5.6 HSE Control in Storage and Preservation Phase

5.6.1 HSE Requirements for Storage

1. Classified Storage:

- Hazardous Chemicals: Store separately by hazard category (e.g., separate storage of flammable and explosive materials from corrosive materials), and install explosion-proof lighting and ventilation facilities;
- Special Equipment: Reserve operating space in the storage area to avoid collisions, and conduct regular anti-rust inspections;
- General Materials: Classify by storage conditions (temperature and humidity) with clear labels;

2. Facility Configuration:

- Fire-Fighting Facilities: Equip fire extinguishers, fire sand and fire hoses according to regional risks, and conduct regular inspections of effectiveness;
- Emergency Materials: Equip leakage treatment kits (absorbent cotton, neutralizers) in hazardous chemical storage areas;
- Safety Signs: Post signs such as "No Open Flame", "Weight Limit" and "Protection Requirements";

3. Management Systems:

- Establish an HSE inspection system for stored materials, and inspect the integrity of packaging and leakage every week;
- Implement "double-person receiving and dispatching, double-person storage" for hazardous chemicals, and record in-out warehouse ledgers.

5.6.2 Material Preservation and Maintenance

1. Regular Inspection: The Warehousing Center inspects the status of stored materials every week and records deterioration and invalidation (e.g., expired chemicals, rusted equipment);
2. Special Maintenance: Conduct regular lubrication and moisture-proof treatment for special equipment, and inspect the sealing of chemical packaging;
3. Issue Handling: Immediately isolate materials with HSE issues (e.g., damaged packaging), feedback to the Procurement Department, and initiate emergency disposal if necessary.

5.7 HSE Management in Usage Phase

5.7.1 Inspection Before Usage

The Requisition Department conducts inspections before using procured materials:

1. Equipment Category: Inspect safety protection devices (protective covers, emergency stop buttons), calibration status of instruments, and effectiveness of grounding;
2. Chemical Category: Verify MSDS and confirm usage protection measures (ventilation, personal protective equipment);
3. Labor Protection Equipment Category: Inspect protection performance (e.g., impact resistance of safety helmets, sealing of protective clothing);

4. Fill out the *HSE Inspection Form for Procured Materials Before Usage* (Appendix H); unqualified materials shall not be used.

5.7.2 In-Process Usage Monitoring

1. Daily Monitoring: Record the HSE performance of materials in use (e.g., equipment operating temperature, chemical usage consumption);
2. Abnormality Handling: Immediately stop using materials if HSE abnormalities are found (e.g., equipment abnormal noise, chemical leakage), and report to the HSE Management Department;
3. Regular Maintenance: Conduct equipment maintenance as required (e.g., lubricating oil replacement, filter cleaning) to ensure HSE performance;
4. Fill out the *HSE Performance Monitoring Record for Materials and Equipment* (Appendix I).

5.7.3 HSE Performance Feedback

1. The Requisition Department summarizes the HSE performance of materials in use monthly (number of failures, number of safety hazards) and feeds it back to the Procurement Department;
2. The Procurement Department synchronizes the performance information to suppliers quarterly and requests improvements;
3. The HSE Management Department analyzes the HSE performance data of procured materials annually, serving as a basis for procedure revision and supplier classification.

5.8 HSE Disposal of Unqualified Materials

5.8.1 Disposal Principles

- Safety Priority: Isolate unqualified materials (especially hazardous chemicals) and set warning signs;
- Classified Disposal: Adopt return/replacement, destruction or maintenance measures based on causes; unauthorized discarding is strictly prohibited;
- Traceable Closure: Record the entire disposal process to ensure traceable responsibility.

5.8.2 Disposal Process

1. The Warehousing Center/Requisition Department submits the *HSE Disposal Application Form for Unqualified Materials* (Appendix J) with relevant evidence;
2. The Procurement Department, together with the HSE Management Department, analyzes the causes:
 - Supplier Responsibility (substandard quality): Notify the supplier to submit a plan within 3 days, with priority given to return/replacement;
 - Transportation/Storage Responsibility: The responsible party shall bear compensation and conduct safe transfer and disposal;
3. Disposal Implementation:

- Return/Replacement: Hazardous materials shall be transported back by the original transporter to avoid secondary risks;
 - Destruction: Hazardous chemicals shall be destroyed by qualified entities, and destruction certificates shall be provided;
 - Maintenance: Special equipment shall be maintained by the original supplier or qualified entities, followed by re-acceptance;
4. Record the disposal results in the procurement HSE ledger; the HSE Management Department verifies the effectiveness.

5.9 Procurement HSE Records and Archive Management

5.9.1 Record Contents

The Procurement Department establishes the *Procurement Business HSE Management Ledger* (Appendix K), recording:

- Procurement plan HSE review forms, requisition HSE review forms;
- Supplier HSE qualification review forms, capability assessment forms, on-site survey reports;
- Bidding document HSE review reports, contract HSE clause review forms;
- Material arrival inspection forms, HSE-specific acceptance reports, unqualified disposal records;
- Material pre-usage inspection forms, HSE performance monitoring records.

5.9.2 Retention Requirements

- Paper Records: Archived by the Procurement Department with a retention period of no less than 3 years;
- Electronic Records: Synchronously uploaded to the Company's HSE management system to ensure traceability;
- Archive Access: Requires approval from the head of the Procurement Department; unauthorized copying is strictly prohibited.

5.10 Procurement HSE Risk Monitoring and Improvement

5.10.1 Risk Monitoring

- Daily Monitoring: The HSE Management Department conducts random inspections of procurement contracts and acceptance records monthly, and orders rectification if problems are found;
- Special Inspections: Conduct special inspections on procurement of hazardous materials and special equipment quarterly to verify supplier qualifications and transportation compliance;
- Risk Early Warning: Issue early warnings for situations such as decline in suppliers' HSE performance and updates to industry standards, and adjust procurement strategies.

5.10.2 Continuous Improvement

- Regular Review: The HSE Management Department organizes annual HSE management reviews of procurement business to analyze problems (e.g., unclear acceptance standards);
- Training Enhancement: Conduct procurement HSE training every six months, covering interpretation of new regulations and typical cases;
- Process Optimization: Revise this procedure and forms based on review results to improve management efficiency.

6 Supporting Documents

- *HSE Management Specifications for Procurement Business*
- *COMPANY HSE Control Requirements for Material Procurement*
- *Company HSE Management Procedure for Suppliers and Contractors*
- *Company HSE Management System Manual (compliant with Q/SY08002 Series Standards)*
- *Special Equipment Safety Law*
- *Regulations on the Safety Management of Hazardous Chemicals*
- *GB 190 Packaging Marks for Dangerous Goods*
- *GB 15577 Safety Code for Dust Explosion Prevention*
- *HSE Document and Record Control Procedure*
- *HSE Performance Measurement and Monitoring Management Procedure*
- *Emergency Management Procedure*

7 Appendices

Appendix A: Procurement Requisition Form (Template)

Requisition Department		Application Date	Year Month Day
Material Name	Specification Model	Quantity	Purpose
Deadline for Requisition		Budget Amount (10,000 RMB)	

HSE Review Result	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Signature of Department Head	
Remarks	(Special HSE requirements shall be specified)		

Appendix B: Procurement Requisition HSE Review Form (Template)

Procurement Requisition No.		Review Date	Year Month Day
Material Name / Type		Specification Model	
I. HSE Technical Requirements	1. Safety Standards: <input type="checkbox"/> National Standard <input type="checkbox"/> Industry Standard <input type="checkbox"/> Enterprise Standard (Code:) 2. Environmental Requirements: <input type="checkbox"/> RoHS Certification <input type="checkbox"/> No VOCs (Limit:) <input type="checkbox"/> Wastewater/Exhaust Emission (Standard:) 3. Occupational Health: <input type="checkbox"/> Noise (dB ≤) <input type="checkbox"/> Vibration (mm/s ≤) <input type="checkbox"/> Toxicity (LD50:) 4. Special Performance: <input type="checkbox"/> Explosion-Proof (Grade:) <input type="checkbox"/> Anti-Static <input type="checkbox"/> Temperature Resistance (°C) <input type="checkbox"/> Pressure Resistance (MPa)		
II. Usage Scenario Risks	1. Scenario Description: (e.g., high-alt operation, flammable and explosive environment) 2. Potential Risks:		

	<input type="checkbox"/> Mechanical Injury <input type="checkbox"/> Fire <input type="checkbox"/> Poisoning <input type="checkbox"/> Environmental Pollution		
III. Storage/Transportation Requirements	1. Storage: <input type="checkbox"/> Room Temperature <input type="checkbox"/> Refrigeration (°C) <input type="checkbox"/> Explosion-Proof Warehouse <input type="checkbox"/> Isolated Storage 2. Transportation: <input type="checkbox"/> Hazardous Goods Qualification <input type="checkbox"/> Shock-Proof <input type="checkbox"/> Leak-Proof <input type="checkbox"/> Light-Proof		
IV. Technical Document Requirements	<input type="checkbox"/> MSDS <input type="checkbox"/> Special Equipment Certificate of Conformity <input type="checkbox"/> Explosion-Proof Certification <input type="checkbox"/> Environmental Testing Report		
Review Opinion	<input type="checkbox"/> Meet HSE Requirements, Approve Procurement <input type="checkbox"/> Not Meet, Need Supplementation:		
Reviewer Signature	Requisition Department: Engineering Technology Department: HSE Management Department:		

Appendix C: Supplier HSE Capability Assessment Form (Template)

Supplier Name		Assessment Date	Year Month Day
Assessment Item	Assessment Content	Scoring Standard (10-Point Scale)	Score

HSE System	1. Validity of HSE management system certification 2. Completeness of systems (responsibility system, emergency plan) 3. Frequency and records of emergency drills	3 points for valid certification, 3 points for complete systems, 4 points for up-to-standard drills	
Product Quality	1. Standardization of inspection processes 2. Product qualification rate in the past year 3. Records of non-conforming product disposal	3 points for standardized processes, 3 points for qualification rate \geq 98%, 4 points for proper disposal	
Environmental Management	1. Certificates of up-to-standard operation of environmental protection facilities 2. Compliance of waste disposal 3. Environmental complaint records	3 points for up-to-standard facilities, 3 points for compliant disposal, 4 points for no complaints	
Occupational Health	1. Equipped rate of protective equipment 2. Coverage rate of occupational health examinations 3. Occupational disease history records	3 points for 100% equipped rate, 3 points for 100% examination coverage, 4 points for no occupational disease history	
After-Sales Service	1. Fault response time 2. Technical support capability 3. Customer satisfaction	3 points for response \leq 24h, 3 points for adequate support, 4 points for satisfaction \geq 90%	
Total Score	(Full score: 50 points; \geq 40 points: Qualified)		

Assessment Conclusion	<input type="checkbox"/> Qualified <input type="checkbox"/> Pending Rectification <input type="checkbox"/> Unqualified	Assessor Signature:	
-----------------------	---	---------------------	--

Appendix D: Procurement Bidding Evaluation HSE Review Report (Template)

Project Name		Review Date	Year Month Day
Bidder Name		Bid Document No.	
Review Content	Review Focus	Review Result	Remarks
HSE Compliance of Products	1. Whether HSE technical requirements are met 2. Whether relevant certifications are complete 3. Whether MSDS (for chemicals) is complete		
Supplier HSE Capability	1. Operation status of HSE system 2. HSE accident records in the past 3 years 3. HSE support for after-sales service		
HSE Risk Control	1. HSE measures for transportation/installation 2. Emergency disposal plan 3. Personnel training plan		
Review Score	(Weight: 20%; Full score: 100 points)		
Review Conclusion	<input type="checkbox"/> HSE Qualified <input type="checkbox"/> HSE Unqualified (Reason:)		

Reviewer Signature (HSE Management Department)		Signature of Bidding Evaluation Team Leader	
--	--	---	--

Appendix E: Procured Material Arrival Inspection Form (Template)

Inspection Date	Year Month Day	Supplier Name	
Material Name	Specification Model	Quantity	Contract No.
I. Document Verification	<p>1. Product Certificate of Conformity: <input type="checkbox"/> Available <input type="checkbox"/> Unavailable</p> <p>2. HSE Inspection Report: <input type="checkbox"/> Available <input type="checkbox"/> Unavailable</p> <p>3. MSDS (for chemicals): <input type="checkbox"/> Complete <input type="checkbox"/> Incomplete <input type="checkbox"/> Unavailable</p> <p>4. Special Equipment Documents: <input type="checkbox"/> Manufacturing Permit <input type="checkbox"/> Installation Manual <input type="checkbox"/> Unavailable</p>		
II. Appearance and Label	<p>1. Packaging: <input type="checkbox"/> Intact <input type="checkbox"/> Damaged (Location:)</p> <p>2. Safety Warning Label: <input type="checkbox"/> Clear <input type="checkbox"/> Blurred <input type="checkbox"/> Unavailable</p> <p>3. Nameplate (for special equipment): <input type="checkbox"/> Complete <input type="checkbox"/> Missing (Content:)</p>		
III. Quantity and Specification	<p>1. Quantity: <input type="checkbox"/> Consistent with Contract <input type="checkbox"/> Inconsistent</p>		

	(Difference:) 2. Specification: <input type="checkbox"/> Consistent with Contract <input type="checkbox"/> Inconsistent (Difference:)		
Inspection Result	<input type="checkbox"/> Qualified, Approve Warehousing <input type="checkbox"/> Unqualified, Reason:		
Inspector Signature	Warehousing Center: Procurement Department: Requisition Department (if necessary):		

Appendix F: Procured Material HSE-Specific Acceptance Report (Template)

Acceptance No.		Acceptance Date	Year Month Day
Material Name	Specification Model	Supplier Name	
Acceptance Type	<input type="checkbox"/> Special Equipment <input type="checkbox"/> Hazardous Chemicals <input type="checkbox"/> Other Important Materials		
I. Safety Performance Testing	Testing Item	Standard Requirement	Testing Result
	1. Safety Devices of Special Equipment		
	2. Toxicity Testing of Chemicals		
	3. Insulation Performance of Electrical Equipment		

II. Environmental Indicator Testing	1. Exhaust Emission		
	2. Wastewater Emission		
	3. Noise/Vibration		
III. Occupational Health Assessment	1. Effectiveness of Protection Measures		
	2. Exposure Limits of Hazardous Substances		
Acceptance Conclusion	<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified (Reason:)		
Inspector Signature	HSE Management Department: Engineering Technology Department: Equipment Department (for special equipment):		

Appendix G: HSE Acceptance Non-Conformity Notice (Template)

Notice No.		Issue Date	Year Month Day
Supplier Name		Procurement Contract No.	
Unqualified Material	Name: Specification: Quantity:		
Reasons for Non-Conformity	1. Document Issue: <input type="checkbox"/> No Certificate of Conformity <input type="checkbox"/> Incomplete MSDS		

	<input type="checkbox"/> Missing Special Equipment Documents 2. Appearance Issue: <input type="checkbox"/> Damaged Packaging <input type="checkbox"/> Blurred Label <input type="checkbox"/> Leakage 3. Performance Issue: <input type="checkbox"/> Safety Device Failure <input type="checkbox"/> Substandard Environmental Performance <input type="checkbox"/> Excessive Toxicity		
Disposal Requirements	1. Submit a rectification plan before Year Month Day; 2. Rectification Method: <input type="checkbox"/> Return/Replace <input type="checkbox"/> Supplement Documents <input type="checkbox"/> Maintenance; 3. Failure to rectify on time will result in liability for breach of contract in accordance with the contract.		
Issuing Department	Procurement Department (Seal)	Contact Person & Tel	
Supplier Confirmation	Signature: Date: (Fax/Scanned Copy Valid)		

Appendix H: HSE Inspection Form for Procured Materials Before Usage (Template)

User Department		Inspection Date	Year Month Day
Material Name	Specification Model	Procurement Contract No.	

Inspection Item	Inspection Content	Inspection Standard	Result (<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified)
Equipment Category	1. Safety Protection Devices	Complete and Secure	
	2. Instrument Status	Calibrated and Functioning Normally	
	3. Grounding/Insulation	Reliable Grounding, Up-to-Standard Insulation	
	4. Emergency Stop Button	Functioning Normally	
Chemical Category	1. MSDS Verification	Consistent with Actual Material	
	2. Packaging Sealing	No Leakage	
	3. Protection Measures	Adequate Ventilation, Proper Personal Protective Equipment	
Labor Protection Equipment Category	1. Protection Performance	Compliant with Standards, No Damage	
	2. Size Adaptability	Fit Body, No Impact on Operation	
Inspection Conclusion	<input type="checkbox"/> Qualified, Approved for Usage <input type="checkbox"/> Unqualified, Prohibited from Usage (Reason:)		
Inspector Signature		User Signature	

Appendix I: HSE Performance Monitoring Record for Materials and Equipment (Template)

User Department		Recording Period	Year Month Day - Year Month Day
Material Name	Specification Model	Equipment No. (if applicable)	
Monitoring Item	Monitoring Frequency	Standard Requirement	Monitoring Result
Operating Temperature	Once Daily	≤ °C	
Operating Noise	Once Weekly	≤ dB	
Number of Failures	Monthly Statistics	≤ Times/Month	
Safety Hazards	Record Upon Discovery	No Major Hazards	
Maintenance Record	Maintained as Required	Timely Maintenance, Complete Records	
Abnormality Handling	Abnormality Description: Handling Measures: Handling Result:		
Recorder Signature		Department Head Review	

Appendix J: HSE Disposal Application Form for Unqualified Materials (Template)

Application Department		Application Date	Year Month Day
Unqualified Material Info	Name: Specification: Quantity: Contract No.:		
Reasons for Non-Conformity	(Attach <i>HSE Acceptance Non-Conformity Notice</i> No.:) <input type="checkbox"/> Supplier Quality		

	Issue <input type="checkbox"/> Transportation Damage <input type="checkbox"/> Storage Deterioration <input type="checkbox"/> Other:		
Proposed Disposal Plan	<input type="checkbox"/> Return/Replace (Expected Completion Time:) <input type="checkbox"/> Destruction (Entrusted Entity: Qualification No.:) <input type="checkbox"/> Maintenance (Maintenance Entity: Qualification No.:)		
Risk Control Measures	1. Storage Location: <input type="checkbox"/> Isolation Area <input type="checkbox"/> Explosion-Proof Warehouse <input type="checkbox"/> Other: 2. Protection Measures: <input type="checkbox"/> Warning Signs <input type="checkbox"/> Fire-Fighting Equipment <input type="checkbox"/> Special Personnel Supervision		
Approval Opinion	Procurement Department: Signature: Date: HSE Management Department: Signature: Date:		
Disposal Result	Completion Time: Supporting Materials: <input type="checkbox"/> Return/Replacement Form <input type="checkbox"/> Destruction Certificate <input type="checkbox"/> Maintenance Acceptance Report		

Appendix K: Procurement Business HSE Management Ledger (Template)

No.	Procurement Plan	Material	Supplier	Contract No.	HSE Review	Acceptance Result	Unqualified	Usage Performance	Remarks
-----	------------------	----------	----------	--------------	------------	-------------------	-------------	-------------------	---------

No.	Name	Name		w Resul t		Disposal Status	nce Feedback	
1								
2								
3								

Appendix L: Examples of HSE Technical Requirements for Important Materials and Equipment

L.1 HSE Requirements for Mechanical Equipment

- Safety Protection Devices: Complete and secure protective covers for transmission parts, protective rail height $\geq 1.2\text{m}$;
- Emergency Stop Devices: Response time $\leq 0.5\text{s}$, clear identification;
- Noise: Operating noise $\leq 85\text{dB (A)}$, noise at operator position $\leq 80\text{dB (A)}$;
- Vibration: Vibration at bearing parts $\leq 6.3\text{mm/s}$;
- Electrical Safety: Protection grade $\geq \text{IP54}$, grounding resistance $\leq 4\Omega$.

L.2 HSE Requirements for Electrical Equipment

- Insulation Performance: Phase-to-phase insulation resistance $\geq 10\text{M}\Omega$, phase-to-ground insulation resistance $\geq 5\text{M}\Omega$;
- Explosion-Proof Grade: Ex d IIB T4 Ga for use in flammable and explosive environments;
- Overload Protection: Equipped with overcurrent, overvoltage and overheating protection functions;
- Wiring: Cables protected by conduits, no exposure, clear identification.

L.3 HSE Requirements for Chemicals

- MSDS: Contains 16 items, compliant with GB/T 16483;
- Packaging: Compliant with GB 190, corrosion-resistant materials for corrosive chemicals;
- Toxicity: Acute oral LD50 $\geq 500\text{mg/kg}$ (solids), $\geq 1000\text{mg/kg}$ (liquids);
- Environmental Protection: VOCs content $\leq 100\text{g/L}$, biodegradation rate $\geq 90\%$.

Appendix M: Procurement HSE Acceptance Checklist

Category	Inspection Item	Inspection Standard	Inspection Method	Inspection Result (<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified)	Remarks
Documents	Product Certificate of Conformity	Complete, valid, consistent with actual materials	Document Review		
	Operation Manual	Contains HSE operation requirements	Document Review		
	MSDS (Chemicals)	Complete, up-to-date version	Document Review		
	Certification Certificates	Complete explosion-proof, environmental certifications	Document Review		
Appearance & Label	Product Label	Clear name, specification, production date	Visual Inspection		
	Safety Warning	Compliant with GB 2894, clear and eye-catching	Visual Inspection		
	Packaging Condition	Intact, no damage, no leakage	Visual Inspection + Touch		
Performance Testing	Safety Devices	Normal function, timely response	Functional Test		
	Environmental Indicators	Up-to-standard emissions, no	Testing Instrument +		

		peculiar smell	Sensation		
	Occupational Health Indicators	Noise, vibration meet limits	Testing Instrument		

Appendix N: Procurement HSE Management Process

graph TD

A[Procurement Requisition Submission] --> B[HSE Technical Requirements Formulation]

B --> C[Procurement Plan HSE Review]

C --> D[Supplier HSE Selection (Qualification Review + On-Site Survey)]

D --> E[Bidding Document HSE Preparation + Bidding Evaluation HSE Review]

E --> F[Procurement Contract HSE Clause Signing]

F --> G[Material Transportation/Packaging HSE Control]

G --> H[Arrival Inspection (Routine + HSE-Specific Acceptance)]

H --> I[Storage and Preservation HSE Control]

I --> J[Pre-Usage HSE Inspection + In-Process Monitoring]

J --> K[HSE Performance Feedback]

K --> L[Continuous Improvement (Procedure Revision/Supplier Optimization)]

H --> M[Unqualified Material HSE Disposal]

M --> F(Re-Procurement or Rectification)

Appendix O: List of Key Controlled Materials for Procurement HSE Management

1. Equipment Related to Major Hazard Sources

- Pressure vessels, pressure pipelines
- Hoisting machinery (rated lifting capacity $\geq 10t$)
- Hazardous chemical storage tanks
- Boilers (rated evaporation capacity $\geq 1t/h$)

2. Special Equipment

- Elevators (cargo elevators)
- Factory vehicles (forklifts, tractors)

- Large amusement facilities (if any)

- Passenger ropeways (if any)

3. Environmental Protection Equipment

- Wastewater treatment equipment (treatment capacity $\geq 10\text{m}^3/\text{h}$)

- Exhaust treatment equipment (treatment air volume $\geq 10,000\text{m}^3/\text{h}$)

- Noise control equipment (noise reduction $\geq 20\text{dB}$)

- Solid waste treatment equipment

4. Fire-Fighting Equipment

- Fire pumps (flow rate $\geq 10\text{L/s}$)

- Automatic fire-extinguishing systems (sprinklers, gas fire-extinguishing)

- Fire-fighting vehicles

- Emergency lighting systems

5. Hazardous Chemicals

- Flammable and explosive substances (e.g., acetylene, propane, gasoline)

- Toxic and harmful substances (e.g., methanol, formaldehyde, cyanides)

- Corrosive substances (e.g., sulfuric acid, hydrochloric acid, sodium hydroxide)

- Oxidizing agents, organic peroxides

6. Labor Protection Equipment

- Special labor protection equipment (safety helmets, safety belts, gas masks)

- Emergency rescue equipment (air respirators, first-aid kits)

- Occupational health monitoring equipment (noise detectors, gas detectors)

8 Supplementary Provisions

8.1 This procedure shall be interpreted by the Company's HSE Management Department.

8.2 This procedure shall come into force on the date of issuance. In case of any inconsistency between existing procurement business HSE management regulations and this procedure, this procedure shall prevail.

8.3 This procedure shall be revised once a year, or updated in a timely manner according to changes in national laws and

regulations, CNPC/Pipeline Bureau management requirements and Company business.

8.4 For matters not covered in this procedure, refer to *HSE Management Specifications for Procurement Business* and relevant laws and regulations.