



# **Employee HSE Training Management Procedure**

## **Document No.: CLADDING-HSE-PD-37**

### **Chapter 1 General Provisions**

#### **Article 1 Purpose**

To standardize the Health, Safety and Environment (HSE) training management of the Company, improve all employees' HSE awareness and skills, prevent work safety accidents, occupational health injuries and environmental pollution incidents, protect employees' life safety and health, and ensure the compliant operation of HSE in business links including material warehousing, equipment maintenance, transportation and distribution, equipment procurement and supply, this procedure is formulated in accordance with national laws and regulations as well as the requirements of superior units.

#### **Article 2 Basis**

This procedure is formulated in accordance with laws, regulations and institutional documents including the *Work Safety Law of the People's Republic of China*, *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, *Provisions on Safety Training for Production and Business Units*, *Regulations on the Training, Assessment and Management of Special Operation Personnel*, *PIPING SYSTEM PTE LTD HSE Management System Requirements*, *Employee HSE Training Management Specification* and *Pipeline Materials and Equipment Co., Ltd. HSE Management System Documents*.

#### **Article 3 Scope of Application**

This procedure applies to all employees of the Company, including regular employees (management, technical and operational positions), dispatched workers, interns, contractor employees, temporary workers (project-based auxiliary personnel) and supplier on-site personnel; it covers HSE training for the entire business chain including material warehousing (including temporary storage of hazardous materials), equipment maintenance (hot work / work at height / confined space work), transportation and distribution, equipment procurement and loading/unloading operations.

## **Article 4 Management Principles**

1. Unified Leadership and Level-by-Level Responsibility: The Company's HSE Committee makes overall decisions, the HSE Management Department takes the lead in planning, and business departments implement professional training, forming a responsibility system with clear levels;
2. Full Coverage with Focus on Key Areas: All employees must receive HSE training, with emphasis on strengthening training for high-risk positions, special operation personnel and new recruits;
3. Integrating Theory with Practice and Emphasizing Practical Effectiveness: Training content focuses on post risks (such as warehouse stacking, vehicle emergency response), and strengthens practical drills and on-site application;
4. Continuous Improvement and Closed-Loop Management: Through the closed loop of "needs analysis - plan formulation - implementation and assessment - effect evaluation - optimization and improvement", dynamically adjust training content based on regulatory updates and accident cases.

## **Chapter 2 Training Organization and Responsibilities**

### **Article 5 Responsibilities of the Company's HSE Committee**

1. Approve the Company's annual overall HSE training plan and major training budgets;
2. Make decisions on major HSE training matters (such as the construction of special operation training systems, cooperation with external experts);
3. Supervise the implementation effect of HSE training and listen to training work reports once every six months;
4. Approve HSE training recognition and reward plans and promote the implementation of training achievements.

### **Article 6 Responsibilities of the HSE Management Department (Quality, Safety and Environmental Protection Department)**

1. Overall Planning: Prepare the next year's *Overall HSE Training Plan* in December each year, issue it after approval by the Company's HSE Committee, and clarify training objectives, key content, coverage scope and resource allocation;
2. Standard Formulation: Compile unified HSE training materials (basic knowledge manuals, post risk guides, emergency response manuals), develop courseware (including videos and case databases), and update the *Special Operation Personnel Training Requirements* (Appendix E);
3. Organization and Implementation: Take the lead in conducting company-level HSE training (such as emergency rescue, risk assessment, interpretation of new regulations)

and coordinate the initial training and re-examination of special operation personnel qualifications;

4. Supervision and Evaluation: Conduct random checks on training records (attendance sheets, assessment results) of various departments quarterly, and organize annual training system audits; take the lead in conducting four-level evaluation of training effects (reaction level, learning level, behavior level, result level);
5. File Management: Establish company-level HSE training files (annual plans, teaching materials and courseware, external training contracts) and guide all departments to improve training files;
6. Faculty Development: Establish an internal HSE trainer database (including HSE specialists and technical backbones), organize trainer training (no less than 16 class hours per year), and evaluate the qualifications of external experts.

## **Article 7 Responsibilities of the Human Resources Department**

1. System Integration: Integrate HSE training into the Company's overall training system, with simultaneous planning and simultaneous assessment;
2. Resource Guarantee: Be responsible for the construction and maintenance of training venues (including practical training venues) and online platforms (e-learning + mobile learning); guarantee training funds (included in the annual budget, not less than 2.5% of the total salary);
3. Assessment Application: Incorporate HSE training assessment results into employee performance evaluation (accounting for 10%-15% of annual performance), directly linking to job promotion and selection of excellent employees;
4. Personnel Management: Assist the HSE Management Department in conducting HSE training for new recruits and interns, and establish electronic HSE training files for employees (one file per person).

## **Article 8 Responsibilities of Business Departments (Warehousing, Equipment, Transportation, Procurement, Outsourcing Management Departments, etc.)**

1. Needs Analysis and Planning: Conduct HSE training needs analysis (regulatory requirements, post risks, employee competency gaps) in October each year, and formulate the *Departmental HSE Training Implementation Details* and monthly training plans;
2. Implementation of Professional Training:
  - Warehousing Management Department: Organize training on material storage safety (hazardous materials zoning, stacking height limits) and loading/unloading operation safety;
  - Equipment Management Department: Conduct training on safety of hot work / work at height / confined space work and equipment maintenance protection;

- Transportation Management Department: Implement training on HSE management of transport vehicles and safe driving of drivers (including emergency response);
  - Procurement Department: Conduct training on supplier HSE evaluation standards and procurement material transportation safety;
  - Outsourcing Management Department: Be responsible for contractor employees' on-site entry training and pre-operation safety disclosure;
3. Practical Operation and Verification: Organize no less than 1 post practical drill (such as fire extinguisher use, respirator wearing) per quarter, and verify the application effect through on-site inspections (such as stacking standardization, pre-departure inspection for drivers) within 1 month after training;
  4. Information Reporting: Submit the *Monthly Departmental Training Implementation Status Form* to the HSE Management Department before the 5th of each month, and submit an annual training work summary.

## **Article 9 Responsibilities of Managers at All Levels**

1. Department Heads: Serve as the primary responsible persons for HSE training in their departments, approve the *Departmental HSE Training Implementation Details*, guarantee training time (no less than 4 hours per person per month) and resources, and take the lead in participating in HSE training;
2. Team Leaders: Be responsible for daily team-level training (pre-shift safety disclosure, post risk reminders), no less than once a week, and fill out the *Team HSE Training Log*;
3. Special Operation Leaders: Be responsible for special practical guidance for special operation personnel, and conduct targeted training for the team before work (such as fire prevention measures for welding work) to ensure 100% training coverage.

## **Article 10 Responsibilities of Employees**

1. Actively participate in required HSE training and complete class hours on time (new recruits  $\geq 24$  class hours in the first year, on-the-job employees  $\geq 12-20$  class hours per year);
2. Master HSE knowledge and skills for their posts (such as PPE use, emergency response), operate in a standardized manner after training, and avoid violations;
3. Put forward 1-2 HSE training needs suggestions (such as training on safe operation of new equipment) each year and participate in training satisfaction surveys;
4. Contractor employees must additionally sign the *HSE Commitment Letter* and comply with the Company's training management requirements.

## **Chapter 3 Training Content and Requirements**

# **Article 11 HSE Training for New Employees (Including Dispatched Workers and Interns)**

## **(I) Three-Level Safety Education (Theoretical Part, Total 16 Class Hours)**

### **1. Company-Level Education (No Less Than 8 Class Hours):**

- Content: Company HSE policies, work safety laws and regulations (*Work Safety Law, Law on the Prevention and Control of Occupational Diseases*), Company HSE rules and regulations (this procedure, operation procedures), distribution of on-site hazard sources (temporary storage areas for hazardous materials, hot work points), warning education on accident cases;
- Implementation: Organized by the HSE Management Department, using the method of "centralized teaching + video learning"; employees can enter department-level training only after passing the assessment ( $\geq 80$  points).

### **2. Department-Level Education (No Less Than 4 Class Hours):**

- Content: Business characteristics and HSE risks of the department (such as material overturning risks in the Warehousing Department, mechanical injury risks in the Equipment Department), departmental HSE management regulations, location and use of safety facilities (fire hydrants, emergency exits), post-related emergency measures;
- Implementation: Organized by the business department, using the method of "on-site teaching + case discussion"; employees can enter team-level training only after passing the assessment ( $\geq 80$  points).

### **3. Team-Level Education (No Less Than 4 Class Hours):**

- Content: Post safety operation procedures (such as stacking height limits for warehousemen, pre-departure inspection for drivers), correct use of tools and equipment (forklifts, welding machines), wearing and maintenance of personal protective equipment (PPE), on-site emergency response (such as small fire fighting);
- Implementation: Organized by the team leader, using the method of "mentor-apprentice demonstration + practical operation guidance"; employees can enter practical training only after passing the assessment ( $\geq 80$  points).

## **(II) Practical Training (No Less Than 8 Class Hours)**

- 1. Content:** PPE wearing (safety helmets, safety belts, anti-static clothing), fire extinguisher operation, emergency evacuation, practical operation of post equipment (such as basic forklift operation, gas detector use);
- 2. Requirements:** 100% qualification in practical assessment (standardized operation, no violations); re-examination is required if unqualified (to be completed within 1 week);
- 3. Follow-Up:** During the probation period (3-6 months), the team leader conducts post application follow-up once a week and records the *New Employee Training Follow-Up Form*.

## Article 12 HSE Training for On-the-Job Employees

### (I) Annual Re-Training (Classified by Post)

Post Type	Training Class Hours	Core Content	Implementing Department	Assessment Requirements
Management Personnel	≥ 16	HSE regulatory updates, risk management (JSA/HAZOP), emergency command, accident investigation methods	HSE Management Department	Theoretical score ≥ 85 points
High-Risk Positions	≥ 20	Post-specific procedures (hot work / work at height / confined space), safe operation of tools (cranes, welding machines), emergency response	Business Departments	Theoretical score ≥ 85 points + 100% qualification in practical operation
Medium-Risk Positions	≥ 16	Safety precautions for equipment fault inspection, load balance during loading/unloading, supplier HSE evaluation	Business Departments	Theoretical score ≥ 80 points + Practical score ≥ 90 points
Low-Risk Positions	≥ 12	Office electricity safety, fire response, safety guidelines for operation areas	Business Departments	Theoretical score ≥ 80 points

### (II) Special Training

1. Training for Special Operation Personnel (Covering Welding, Work at Height, Confined Space Work, Special Equipment Operation, Hazardous Materials Transportation):
  - Initial Training: No less than 32 class hours (12 class hours of theory + 20 class hours of practical operation), including content such as *Special Operation Safety Technical Requirements* (Appendix E), equipment principles and fault emergency response;
  - Re-Examination: Once every 3 years, no less than 8 class hours (new regulations + case analysis + practical random inspection);
  - Requirements: 100% of personnel must work with certificates; re-examination must be completed 30 days before the certificate expires; work without certificates is strictly prohibited.
2. Special Training for High-Risk Work (Hot Work, Work at Height, Confined Space Work, Hoisting):
  - Frequency: Once a quarter, no less than 4 class hours per session;
  - Content: Work permit process, dynamic risk identification, protective equipment upgrade (such as use of new respirators), accident case review;
  - Requirements: After training, employees must pass the simulated assessment of work permits (such as filling out the *Hot Work Permit*).

## **Article 13 HSE Training for Contractor Employees**

### **(I) On-Site Entry Training (No Less Than 8 Class Hours)**

1. Content: Company HSE prohibitions (prohibition of unlicensed hot work, fatigue driving), on-site operation risk notification (such as no open flames in warehousing areas, prevention of mechanical injuries in maintenance areas), emergency evacuation procedures, accident reporting process (24-hour emergency phone);
2. Implementation: Organized by the Outsourcing Management Department, supervised and assessed by the HSE Management Department;
3. Requirements: Theoretical score  $\geq 80$  points, sign the *HSE Commitment Letter*, and issue the "Training Qualification Entry Certificate".

### **(II) Special Training (Before Work)**

1. Content: HSE procedures related to work (such as contractors participating in confined space work must receive training on isolation and replacement requirements), on-site safety disclosure (work scope, supervision requirements);
2. Implementation: Organized by the business department, with the team leader responsible for disclosure, no less than 2 class hours;
3. Requirements: Employees can participate in work only after passing the assessment; training records shall be filed together with the *Outsourced Work HSE Agreement*.

## **Article 14 Special Emergency Training**

1. Coverage Scenarios: Fire and explosion, poisoning and suffocation, vehicle accidents, material leakage, special equipment failures;
2. Frequency: Company-level training once every six months (all employees participate), department-level training once a quarter (for corresponding posts);
3. Content: Interpretation of emergency plans (organization structure, disposal process), use of emergency equipment (fire hoses, rescue tripods), practical drills (simulated rescue for poisoning in confined spaces);
4. Requirements: Evaluate disposal capabilities after drills; employees who fail to meet standards must re-take the drill (to be completed within 1 week).

## **Chapter 4 Training Implementation**

### **Article 15 Training Plan Management**

#### **(I) Needs Analysis (October Each Year)**

1. Dimensions:
  - Regulatory Requirements (such as the new *Rules for Road Transportation of Dangerous Goods*);
  - Post Risk Changes (such as newly added types of hazardous materials in warehousing);
  - Employee Competency Assessment (identifying skill gaps through annual assessments);
  - Summary of Accident Lessons (Company and industry accident cases in the past year);
2. Output: *HSE Training Needs Analysis Form* (Appendix A), which serves as the basis for formulating annual plans.

#### **(II) Plan Formulation**

1. Annual Plan: Led by the HSE Management Department, including training projects, targets, class hours, methods, funds and responsible persons, issued after approval by the Company's HSE Committee (*Appendix B Annual HSE Training Plan Form*);
2. Monthly Plan: Detailed by business departments based on the annual plan, clarifying specific training projects, time, faculty and venues, and submitted to the HSE Management Department for filing before the 25th of each month.

### **Article 16 Training Methods**

#### **(I) Centralized Training**

1. Theoretical Teaching: Company-level training adopts "expert lectures + case discussions" (such as the annual HSE conference), and department-level training adopts "technical backbone teaching + video learning";

2. Practical Training: Conducted in dedicated practical training venues (such as fire drill areas, equipment simulation areas), with on-site demonstrations by internal trainers or external experts (such as mentor-apprentice guidance on safe welding operations).

## **(II) On-Site Training**

1. Pre-Shift Meeting Training: The team leader spends 5-10 minutes before daily work to remind of work risks for the day;
2. On-Site Teaching: Explain risk points and protective measures at operation sites (hazardous materials areas in warehouses, equipment maintenance workshops);
3. Safety Observation: Guide employees to operate in a standardized manner in real time through "observation - communication - correction" (such as adjusting stacking height).

## **(III) Online Training**

1. Platform: Use the Company's e-learning platform and mobile learning system to offer online courses (basic knowledge, regulatory updates, case databases);
2. Functions: Support independent learning (record class hours), online tests (automatic scoring), live lectures (interpretation of new regulations);
3. Requirements: Low-risk positions must complete no less than 4 class hours of online training per year, and high-risk positions no less than 6 class hours.

## **(IV) External Training**

1. Application Scenarios: Initial training for special operations, advanced HSE management training (such as HAZOP analyst certification);
2. Process: The HSE Management Department evaluates the qualifications of external institutions (must have nationally recognized training qualifications), signs training agreements, and tracks training effects.

# **Article 17 Training Resource Management**

## **(I) Faculty Team**

1. Internal Trainers:
  - Selection: Selected from HSE specialists and technical backbones, requiring more than 5 years of relevant experience and passing the assessment (theoretical score  $\geq 90$  points + practical score  $\geq 95$  points);
  - Management: Establish trainer files, record training sessions and effects, conduct trainer competency evaluations once a year, and give performance points to excellent trainers;
2. External Experts:
  - Qualifications: Must have senior professional titles or nationally recognized training qualifications (such as certified safety engineers);

- Evaluation: Collect feedback through the *External Expert Evaluation Form* (including content practicality and teaching level) after training; qualified experts are included in the "External Expert Database".

## (II) Training Facilities

1. Venues: Equip dedicated training classrooms (accommodating more than 50 people) and practical training venues (including fire drill areas and equipment simulation areas);
2. Equipment: Update training equipment (such as new fire extinguishers, VR safety simulation equipment) and conduct inspection and maintenance quarterly;
3. Materials: Establish a training material database (electronic + paper), including teaching materials, courseware and case videos, to facilitate employees' access.

## Chapter 5 Assessment and Evaluation

### Article 18 Training Assessment

#### (I) Assessment Methods

Assessment Type	Application Scenarios	Form
Theoretical Assessment	New employees, on-the-job re-training	Written test (closed-book / open-book), online test, oral questioning (on-site random inspection)
Practical Assessment	Special operations, high-risk positions	On-site operation (such as PPE wearing, welding machine use), emergency drills (such as simulated vehicle fire fighting)
Application Assessment	All positions	On-site inspection of operational standardization (such as warehouse stacking, driver pre-departure inspection) within 1 month after training

#### (II) Assessment Standards

### 1. Mandatory Qualification Items:

- New Employees: Theoretical score  $\geq 80$  points + 100% qualification in practical operation;
  - Special Operation Personnel: Theoretical score  $\geq 85$  points + 100% qualification in practical operation, 100% certification rate;
  - Management Personnel, Operational Personnel, Contractor Employees: 100% assessment qualification rate;
2. Excellent Standards: Theoretical score  $\geq 90$  points + practical score  $\geq 95$  points + no violations in post application; priority for excellent employee selection and promotion.

## (III) Result Handling

1. Qualified Employees: Training records are included in personal files, and employees are allowed to take up posts or continue working;
2. Unqualified Employees: Re-examination is arranged within 1 week; if still unqualified:
  - New Employees: Extend the probation period (maximum 1 month) and strengthen training during the period;
  - On-Site Employees: Transfer to low-risk positions or receive on-leave training (maximum 1 month of on-leave period);
  - Special Operation Personnel: Temporarily withhold the *Special Operation Operation Certificate*; return the certificate after passing training;
3. Contractor Employees: Unqualified employees are prohibited from entering the operation site until passing the re-examination.

## Article 19 Training Effect Evaluation (Four-Level Evaluation Model)

### (I) Reaction Level Evaluation (Within 1 Week After Training)

1. Method: Issue the *HSE Training Satisfaction Questionnaire* (Appendix C) to investigate content including training content practicality, trainer level and method rationality;
2. Standard: Satisfaction  $\geq 85\%$  is qualified; if below 85%, analyze the reasons (such as disconnected content) and make adjustments.

### (II) Learning Level Evaluation (Within 2 Weeks After Training)

1. Method: Evaluate the mastery of knowledge/skills through theoretical tests and practical assessments;
2. Standard: Average theoretical score  $\geq 80$  points and 100% practical qualification rate are qualified; otherwise, supplementary training is required.

### (III) Behavior Level Evaluation (1-3 Months After Training)

#### 1. Method:

- On-Site Inspection: Randomly check employees' operational standardization (such as PPE wearing, work permit implementation);
- Violation Statistics: Compare post violation rates before and after training (a decrease of  $\geq 15\%$  is excellent);

2. Standard: Operational compliance rate  $\geq 90\%$  and violation rate decrease  $\geq 10\%$  are qualified.

### **(IV) Result Level Evaluation (Within 6 Months After Training)**

#### 1. Method:

- Safety Indicators: Count post accident rates (0 severe injuries and above), hidden danger rectification rates (100%);
- Environmental Indicators: 0 environmental pollution incidents, 100% compliant disposal rate of waste;
- Economic Benefits: Cost reduction in equipment damage and material loss due to standardized operation;

2. Output: *Annual HSE Training Effect Evaluation Report*, which is reviewed by the Company's HSE Committee and used for the optimization of the next year's plan.

## **Chapter 6 Training File Management**

### **Article 20 File Content**

#### **(I) Company-Level Files**

1. Annual HSE training plans and approval documents;
2. Training materials, courseware and video cases;
3. External training contracts, invoices and expert qualification certificates;
4. Annual training effect evaluation reports and system audit reports;
5. Special operation personnel qualification ledgers (Appendix E).

#### **(II) Department-Level Files**

1. *Departmental HSE Training Implementation Details* and monthly training plans;
2. Training attendance sheets, assessment score sheets and practical drill records;
3. *Team HSE Training Log* and *HSE Training Needs Analysis Form* (Appendix A);
4. Contractor employees' on-site entry training records and *HSE Commitment Letter*.

#### **(III) Employee Personal Files**

1. Basic Information: Name, post, entry time, qualification certificate number;
2. Training Records: Course names, class hours, assessment scores and copies of attendance sheets for previous training;
3. Qualification Certificates: Copies of special operation operation certificates and HSE training qualification certificates;
4. Application Evaluation: Records of post operational compliance evaluation after training.

## **Article 21 File Management Requirements**

1. Storage Form: Electronic files (Company OA system / HR system) and paper files coexist; electronic files are backed up;
2. Retention Period:
  - Company-level files: Permanently retained;
  - Department-level files: Retained for no less than 3 years;
  - Employee personal files: Permanently retained during employment, retained for 3 years after resignation;
3. Access Permissions:
  - Company-level files: Accessible to the HSE Management Department and members of the Company's HSE Committee;
  - Department-level files: Accessible to department heads and the HSE Management Department;
  - Personal files: Accessible to the employee themselves, their department head and the Human Resources Department;
4. Confidentiality Requirements: Files involving employee privacy (such as health information) and Company secrets (risk assessment reports) are strictly confidential; access requires approval and registration.

## **Chapter 7 Assessment and Rewards/Punishments**

### **Article 22 Rewards**

1. Department Rewards: Departments with excellent annual training effect evaluation (behavioral compliance rate  $\geq 95\%$ , result-level accident rate 0) are given HSE performance bonus points (accounting for 15% of the total department score) and rewarded with training funds (5% of the annual budget);
2. Individual Rewards:
  - Excellent Trainees: Employees with excellent annual training assessment (theoretical score  $\geq 90$  points + practical score  $\geq 95$  points) are given priority for excellent employee selection and job promotion;

- Trainer Rewards: Internal trainers with annual training satisfaction  $\geq 90\%$  and  $\geq 10$  sessions are given performance bonuses (RMB 500-2,000);
- Suggestion Rewards: Employees whose training improvement suggestions are adopted (such as adding VR practical training) are given rewards of RMB 500-1,000.

## **Article 23 Punishments**

### **1. Department Punishments:**

- Deduct HSE performance points of the department (5 points per time) for failing to conduct training as planned;
- Circulate a notice of criticism for incomplete or falsified training files, and deduct the performance of the department head (RMB 500-1,000);

### **2. Individual Punishments:**

- Deduct 10 performance points per time for unexcused absence from required training; cancel the qualification for excellent employee selection if absent for 2 consecutive times a year;
- Deduct performance during the on-leave training period (paid according to the local minimum wage standard) for employees who fail the training assessment and still fail the re-examination;
- Immediately stop work for special operation personnel working without certificates or with expired certificates; fine individuals RMB 1,000-2,000, and the department head is jointly fined RMB 500.

## **Chapter 8 Supplementary Provisions**

### **Article 24 Relevant Documents**

- 1. Work Safety Law of the People's Republic of China*
- 2. Provisions on Safety Training for Production and Business Units*
- 3. Regulations on the Training, Assessment and Management of Special Operation Personnel*
- 4. HSE Management System Requirements*
- 5. Employee HSE Training Management Specification*
- 6. Pipeline Materials and Equipment Co., Ltd. HSE Management Manual*
- 7. Pipeline Materials and Equipment Co., Ltd. HSE Procedures for Various Operations (hot work, work at height, confined space work, transportation, etc.)*

### **Article 25 Record Forms**

- 1. HSE Training Needs Analysis Form (Appendix A)*

2. *Annual HSE Training Plan Form* (Appendix B)
3. *HSE Training Effect Evaluation Form* (Appendix C)
4. *HSE Training File Directory* (Appendix D)
5. *Special Operation Personnel Training Requirements* (Appendix E)
6. *Employee HSE Training Attendance Sheet*
7. *HSE Training Assessment Score Sheet*
8. *Team HSE Training Log*
9. *Annual HSE Training Effect Evaluation Report*

## Article 26 Interpretation and Effectiveness of the Procedure

1. This procedure shall be interpreted by the Company's HSE Management Department (Quality, Safety and Environmental Protection Department);
2. This procedure shall take effect from the date of issuance, and the former *Pipeline Materials and Equipment Co., Ltd. Employee Safety Training Regulations* shall be repealed simultaneously;
3. Matters not covered in this procedure shall be implemented in accordance with national laws and regulations as well as the relevant requirements of the Group and PipeChina.

## Article 27 Appendices

1. Appendix A: *HSE Training Needs Analysis Form*
2. Appendix B: *Annual HSE Training Plan Form*
3. Appendix C: *HSE Training Effect Evaluation Form*
4. Appendix D: *HSE Training File Directory*
5. Appendix E: *Special Operation Personnel Training Requirements*

## Appendices

### Appendix A: HSE Training Needs Analysis Form

Analysis Dimension	Specific Content	Current Situation Assessment	Needs Suggestions	Responsible Person	Completion Time
Regulatory Requirement	1. Newly released HSE regulations	<input type="checkbox"/> Fully covered <input type="checkbox"/>	<input type="checkbox"/> Add training on	Department Safety	2026.01.01

s	(such as updated <i>Regulations on the Safety Management of Hazardous Chemicals</i> ) 2. New HSE requirements from the Group	Partially covered <input type="checkbox"/> Not covered	interpretation of new regulations <input type="checkbox"/> Supplement training on Group requirements	Officer	
Post Risk Changes	1. Newly added positions/equipment (such as new warehouse shelves) 2. Recent risk incidents (such as material overturning hazards)	<input type="checkbox"/> Risks identified and training covered <input type="checkbox"/> <input type="checkbox"/> Risks not identified and no training	<input type="checkbox"/> Add training on safe operation of new equipment <input type="checkbox"/> <input type="checkbox"/> Add training on risk incident review	Department Head	2025.01.01
Employee Competency Assessment	1. Skill gaps identified in annual assessment (such as non-standard PPE wearing) 2. Proportion of new employees	<input type="checkbox"/> Competent <input type="checkbox"/> Partially competent <input type="checkbox"/> Incompetent	<input type="checkbox"/> Add skill enhancement training <input type="checkbox"/> <input type="checkbox"/> Add special training for new employees	Team Leader	2025.01.01
Accident Lesson Summary	1. Company accident cases in the past year 2. Typical industry accidents (such as poisoning in confined spaces)	<input type="checkbox"/> Case training conducted <input type="checkbox"/> No case training conducted	<input type="checkbox"/> Add accident review and discussion <input type="checkbox"/> <input type="checkbox"/> Add industry case learning	HSE Specialist	2025.01.01
Other Needs	1. Training suggestions put forward by employees 2. Training gaps	<input type="checkbox"/> Suggestions adopted <input type="checkbox"/> Suggestions not adopted <input type="checkbox"/>	<input type="checkbox"/> Implement employee suggestions <input type="checkbox"/> Supplement	Department Safety Officer	2025.01.01

	identified in external audits	Audit gaps exist	training for audit gaps		
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## Appendix B: Annual HSE Training Plan Form

No.	Training Project	Training Targets	Training Content	Training Method	Classes Hours	Training Time	Faculty Type	Budget (RMB)	Responsible Person	Remarks
1	Three-Level Safety Education for New Employees	New recruits, interns	Company-level: Regulations + systems; Department-level: Risks + emergency response; Team-level: Procedures + practical operation	Centralized + on-site	24	Once a month	Internal trainers + team leaders	5,000	Human Resources Department	
2	Re-Examination for	Welders, work-at-height	New regulations + accidents	Online + practical	8	March /	External	20,000	HSE Management	

	Special Operation Personnel	operators	nt cases + practical random inspection	operation		September	experts		Department	
3	Special Training for High-Risk Positions	Warehousemen, drivers	Warehouse stacking safety, vehicle emergency response	On-site + drills	20	Once a quarter	Internal trainers	8,000	Business Departments	
4	Emergency Rescue Drills	All employees	Fire fighting, poisoning rescue, vehicle accident escape	Practical drills	4	June / December	Internal trainers + fire fighters	15,000	HSE Management Department	
5	On-Site Entry Training for Contractor Employees	Contractor employees	Company HSE prohibitions + on-site risks + emergency	Centralized + assessment	8	As needed	Outsourcing Management Department	6,000	Outsourcing Management Department	

			procedures							
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## Appendix C: HSE Training Effect Evaluation Form

Evaluation Level	Evaluation Indicators	Evaluation Method	Evaluation Standards	Evaluation Result	Improvement Suggestions
Reaction Level	Training Satisfaction	Issue questionnaires (recovery rate $\geq 90\%$ )	Satisfaction $\geq 85\%$ is qualified; single items of "content practicality" and "trainer level" $\geq 80\%$	<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified	<input type="checkbox"/> Replace trainers <input type="checkbox"/> Optimize content
Learning Level	Knowledge Mastery	Theoretical test (average score), practical qualification rate	Theoretical score $\geq 80$ points, practical qualification rate 100% is qualified	<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified	<input type="checkbox"/> Add review sessions <input type="checkbox"/> Strengthen practical guidance
Behavior Level	Operational Compliance Rate, Violation Rate	On-site inspection (randomly check $\geq 30\%$ of employees), violation statistics (1 month after training)	Compliance rate $\geq 90\%$ , violation rate decrease $\geq 10\%$ is qualified	<input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified	<input type="checkbox"/> Increase on-site supervision frequency <input type="checkbox"/> Conduct re-training
Result Level	Accident Rate, Hidden Danger Rectification Rate	Count post safety indicators (number of accidents, hidden danger)	0 accidents and 100% hidden danger rectification rate are	<input type="checkbox"/> Excellent <input type="checkbox"/> Qualified <input type="checkbox"/> Unqualified	<input type="checkbox"/> Optimize risk control measures <input type="checkbox"/> Expand training coverage

		rectification completion rate) within 6 months after training	excellent; ≤ 1 accident (minor injury) and ≥ 95% rectification rate are qualified		
Evaluator:		Evaluation Date: YYYY-MM-DD	Department Head Signature:		

## Appendix D: HSE Training File Directory

File Category	File Name	Storage Form	Retention Period	Storage Location	Responsible Person
Company-Level Files	Annual Overall HSE Training Plan	Electronic + Paper	Permanent	HSE Management Department	HSE Specialist
	HSE Training Materials and Courseware	Electronic + Paper	Permanent	HSE Management Department	HSE Specialist
	External Training Contracts and Invoices	Electronic + Paper	5 Years	Finance Department + HSE Department	Finance Specialist + HSE Specialist
	Annual Training Effect Evaluation Report	Electronic + Paper	Permanent	HSE Management Department	HSE Specialist
Department-Level Files	<i>Departmental HSE Training Implementation Details</i>	Electronic + Paper	3 Years	Business Departments	Department Safety Officer

	Training Attendance Sheets and Assessment Score Sheets	Electronic + Paper	3 Years	Business Departments	Department Safety Officer
	<i>Team HSE Training Log</i>	Electronic + Paper	3 Years	Business Departments	Team Leader
Personal Files	Employee HSE Training Records	Electronic (HR System)	Permanent during employment, 3 Years after resignation	Human Resources Department	HR Specialist
	Copies of Special Operation Operation Certificates	Electronic + Paper	Permanent during employment, 3 Years after resignation	Human Resources Department	HR Specialist

## Appendix E: Special Operation Personnel Training Requirements

Operation Type	Training Content	Training Class Hours	Assessment Method	Qualification Requirements	Re-Examination Requirements
Welding and Thermal Cutting	1. GB 9448 <i>Safety of Welding and Cutting</i> 2. Fire and explosion prevention measures 3. Safe operation of welding machines 4. Emergency response	Initial training: 32 class hours (12 theoretical + 20 practical) Re-examination: 8 class hours	Theoretical written test (closed-book) + practical assessment (welding quality + safe operation)	Obtain the <i>Special Operation Operation Certificate</i> , valid for 6 years	Re-examination once every 3 years, including theoretical test + practical random inspection

Work at Height	1. Work at height procedures (GB/T 3608) 2. Use of safety belts / safety nets 3. Fall prevention measures 4. Emergency rescue	Initial training: 32 class hours (12 theoretical + 20 practical) Re-examination: 8 class hours	Theoretical written test + practical operation (safety belt fastening + climbing equipment operation)	Obtain the <i>Special Operation Operation Certificate</i> , valid for 6 years	Re-examination once every 3 years, need to provide annual health certificate (no acrophobia, heart disease)
Confined Space Work	1. AQ 3028 <i>Safety Regulations for Confined Space Work</i> 2. Gas detection 3. Use of respirators 4. Poisoning rescue	Initial training: 32 class hours (12 theoretical + 20 practical) Re-examination: 8 class hours	Theoretical written test + practical operation (gas detection + respirator wearing + rescue simulation)	Obtain the <i>Special Operation Operation Certificate</i> , valid for 6 years	Re-examination once every 3 years, need to assess emergency response capabilities
Special Equipment Operation (Crane / Forklift)	1. Equipment principles and safe operation 2. Load calculation 3. Fault inspection 4. Hoisting / loading/unloading safety	Initial training: 40 class hours (16 theoretical + 24 practical) Re-examination: 12 class hours	Theoretical written test + practical operation (equipment operation + load control)	Obtain the <i>Special Equipment Operator Certificate</i> , valid for 4 years	Re-examination once every 4 years, need to provide equipment operation records
Hazardous Materials Transportation	1. <i>Rules for Road Transportation of Dangerous Goods</i> 2. Material	Initial training: 40 class hours (16 theoretical + 24	Theoretical written test + practical operation (emergenc	Obtain the <i>Road Hazardous Goods Transportation Driver</i>	Re-examination once every 3 years, need to assess

	characteristics and protection 3. Leakage disposal 4. Emergency driving	practical) Re-examination: 12 class hours	y disposal + safe driving)	<i>Certificate</i> , valid for 3 years	hazardous materials identification capabilities
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