CLP 中電

Health, Safety, Security and Environment

CLP's HSSE Management System Standard

Powering Asia Responsibly

ABOUT CLP

CLP Holdings Limited, a company listed on the Hong Kong Stock Exchange, is one of the largest investor-owned power businesses in Asia Pacific. Through CLP Power Hong Kong, it operates a vertically-integrated electricity supply business providing a highly-reliable supply of electricity to 80% of Hong Kong's population.

Outside Hong Kong, CLP holds investments in the energy sector in Australia, Chinese Mainland, India, Southeast Asia and Taiwan. Its diversified portfolio of power generation assets include coal, gas, nuclear and renewables (wind, hydro, solar).

The company is the largest external investor in the Chinese mainland's renewable energy sector and the largest investor, foreign or domestic, in India's wind sector. In Australia, its wholly-owned subsidiary EnergyAustralia is one of the largest integrated energy companies, providing gas and electricity to over 2.8 million customers.

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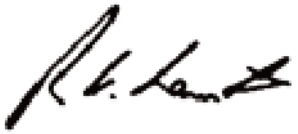
FOREWORD

Safety has always been a core value in CLP and the phrase "Safety Comes First at CLP" has guided us well as we have steadily expanded across the region. The growing and evolving range of business activities throughout the Asian region has highlighted the need for us to manage a wider set of risks to people and the environment as part of our daily operations. Not only do we need to manage safety at over 30 work locations in 6 countries, but also the security of these operations and any impact they may have on the natural environment.

In the CLP Value Framework we say that we care how results are obtained, not just that they are obtained. We can only deliver excellent performance if we operate in a planned and systematic way and that is why we have produced this HSSE Management System Standard. Adoption of this Standard is expected to drive the development of the policies, management systems and practices that will enable us to achieve business results without harm to people or the environment.

This HSSE Management System Standard, which in itself is based on the continual improvement approach, represents the next step in our development and is intended to support our drive to "Power Asia Responsibly." Responsibly means carefully managing all of our HSSE risks from the outset of any project through to operations and beyond. It is important that HSSE risk management becomes an integral part of our daily work so that we achieve our goal of safe, secure and environmentally responsible operations.

We remain steadfast in our belief that no one should be injured while working on a CLP site and that everyone should go home safely to their families at the end of every working day. We also believe that our operations should be secure and avoid adverse impacts to the environment.

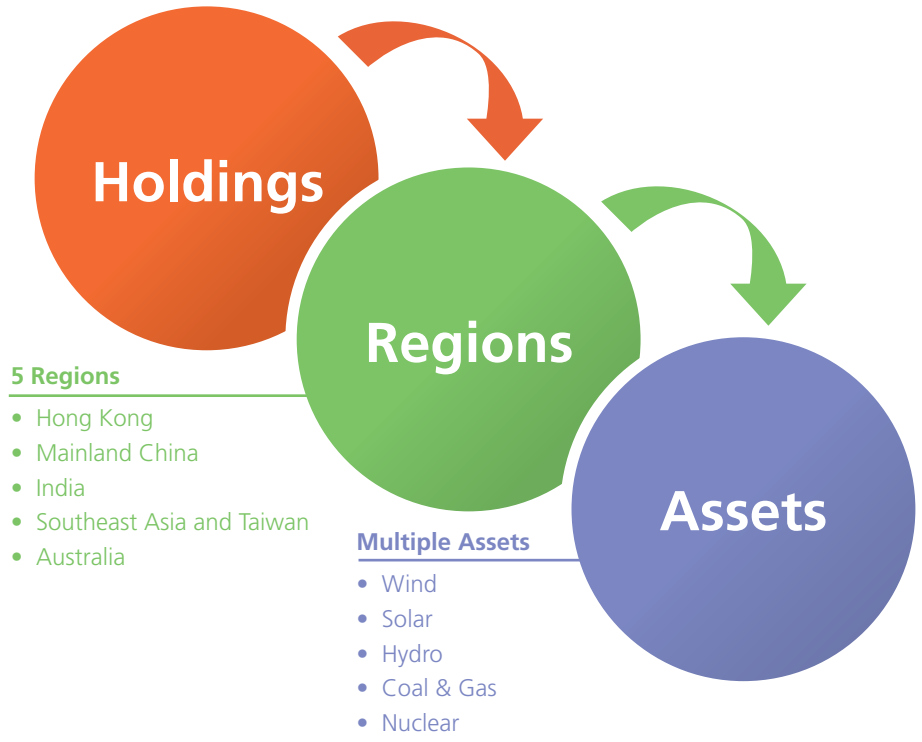


Richard Lancaster
Chief Executive Officer

August 2014

Our Core Values: CLP's business continues to grow in the region and we now operate assets in 5 main regions, namely; Hong Kong, Chinese Mainland, India, South East Asia and Taiwan, and Australia. It is vital that we conduct our operations in all regions in a way that does not harm people or the environment. Our commitment to protect people's health, prevent incidents and injuries and minimize adverse environmental impact is set out in CLP's Value Framework. Included within the Value Framework are our Mission, Values, Commitments, Policy Statements and Code of Conduct. The Policy Statements include an Environmental Policy Statement and an Occupational Safety and Health Policy Statement.

The Structure of The CLP Group



The CLP Group of Companies includes CLP Holdings, its wholly owned subsidiaries (the Regions) and joint ventures or companies in which CLP owns a controlling interest (the Assets).

Our Commitment to HSSE: We can only deliver on our commitments if we organise ourselves in a planned and systematic way and that is why we have produced the CLP Group Health, Safety, Security and Environment (HSSE) Management System Standard. This Standard is supported by relevant Standards and Guidelines accordingly.

A Structured Approach to HSSE management across the Group: The HSSE Management System Standard is intended to assist the regional organisations to implement and build in corporate HSSE requirements into their business specific programmes. Regions are encouraged to develop their Integrated HSSE Management Systems across their assets.

SCOPE

This HSSE Management System Standard defines the CLP Group HSSE standards and expectations for the development and implementation of HSSE Management Systems to ensure that all CLP majority owned assets or assets under the operational control of CLP operate in a way that:

- Protects the health of people impacted by our operations
- Prevents incidents and injuries, with a focus on the integrity of our operations
- Maintains a high level of security, and
- Minimises adverse impact on the environment and uses resources efficiently

This Standard applies when:-

- The Group manages business units, contracts and projects, etc.
- The Group majority owns the asset.
- The Group has operational control of the asset.

International Standard Compliance: this Standard promotes and encourages compliance with the two accepted standards for Health & Safety and Environmental Management, specifically OHSAS 18001 and ISO 14001.

Legislative Compliance: this document anticipates compliance with HSSE legislative requirements applicable in the five regions and to each Business Unit.

Business Unit: In the context of this document, this term means any asset, operation, contract or project which is required to maintain its own HSSE management processes.

This HSSE Management System Standard is intended to be used across the Life Cycle of the Asset from Development through to Decommissioning. Regions should note that Development Projects presented to the CLP Holdings Investment Committee (IC) are required to undergo a variety of HSSE assessments and require functional sign-off.

THE CLP GROUP HSSE MANAGEMENT SYSTEM

The CLP Group HSSE System Standard explains the overall approach to HSSE management across the CLP Group and how the various HSSE Standards and Guidelines should be applied at the Holdings, Regional and Asset level. Their positions in the CLP Group HSSE Framework are illustrated in the diagram below:

Visible Leadership: Executives and senior management must lead by example and demonstrate the desired leadership behaviours that will drive continuous improvement in HSSE performance. Engagement with staff and contractors on HSSE at all levels is encouraged. Management must demonstrate that Safety Comes First at CLP and that a high level of HSSE performance is a requirement across the Group.

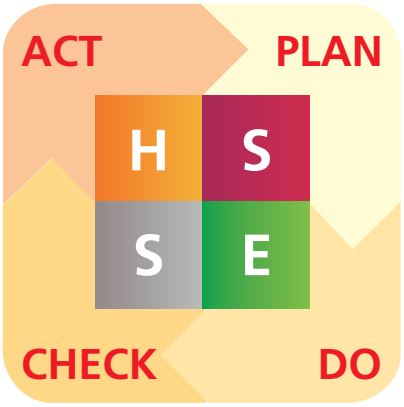
HSSE Standards and Guidelines: CLP has produced a number of HSSE Standards and Guidelines to support the CLP Group HSSE Management System Standard.

Critical Risk Standards: CLP has produced a set of 10 Critical Risk Standards for identified high risk activities, to be used by the Regions when developing their asset based procedures to ensure that risks are well managed and that experiences and best practices from different sites are shared.

Safe Work Practices: to provide guidance on a broad range of health, safety, security and environmental issues, CLP has produced a Safe Work Practices document. This document provides some general directions on how best to approach a variety of tasks that may arise on a CLP site.

MONITORING AND REVIEW

Group Safety Information System (GSIS): The GSIS is based on an industry standard IT platform. This is a flexible software package that guides companies through compliance with ISO 14001, ISO 9000, OHSAS 18001 and other industry standards for HSSE Management. It is a requirement that all corporate and regional organisations use this platform to manage HSSE. The use of this platform, or an equivalent system, at an asset based level is encouraged.



Plan-Do-Check-Act. The CLP Group HSSE Management System Standard is based on the continual improvement methodology of the PDCA cycle. The 15 Elements of the loop are executed through a set of Standards and Guidelines to the requirements of the Policy Statements set out in the Value Framework.

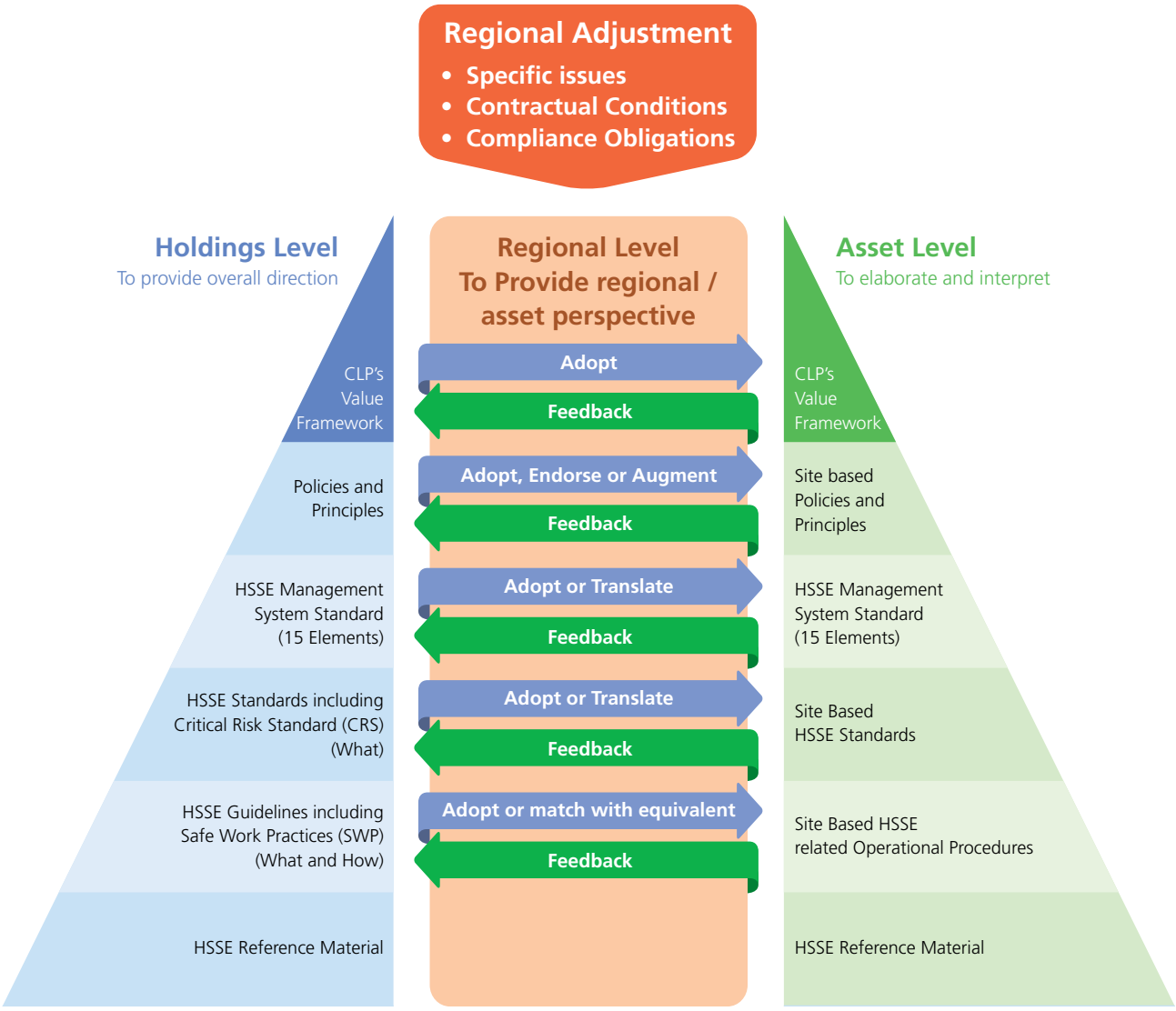
Corporate HSSE Peer Review Programme: The HSSE Peer Review Programme has been developed to assist regions to build core HSSE competence within their organisation and act as a catalyst for learning and sharing across the CLP Group. The Peer Review is also a key measure of assurance that fundamentally sound, risk-based management systems are in place in all operations. All regions participate in the Peer Review programme and provide suitable and sufficient resources to ensure its success.

Self-Assessment Audits and HSSE Plans: Key to the successful implementation of the HSSE system, and in keeping with the principle of continuous improvement is the requirement for business and operations carry out annual self-assessments and third party audits to ensure that they have suitable HSSE systems in place. Such HSSE systems should be compliant with all local regulations and meet the Expectations identified in this Management System Standard. Any gaps identified by self-assessment or third party audits will provide a focus for annual HSSE improvement plans. Reporting on these self-assessment will form one part of the assurance required by the Executive and senior management that HSSE is being effectively and appropriately managed.

HOW THIS MANAGEMENT SYSTEM STANDARD WORKS

HSSE related Policies and Principles from the CLP's Value Framework are used to define the 15 Elements used in the PDCA cycle in the CLP Group HSSE Management System Standard. Each Element is supported by a set of Expectations which encourage excellence in HSSE performance across the CLP Group whilst allowing some flexibility for implementation at a Regional level.

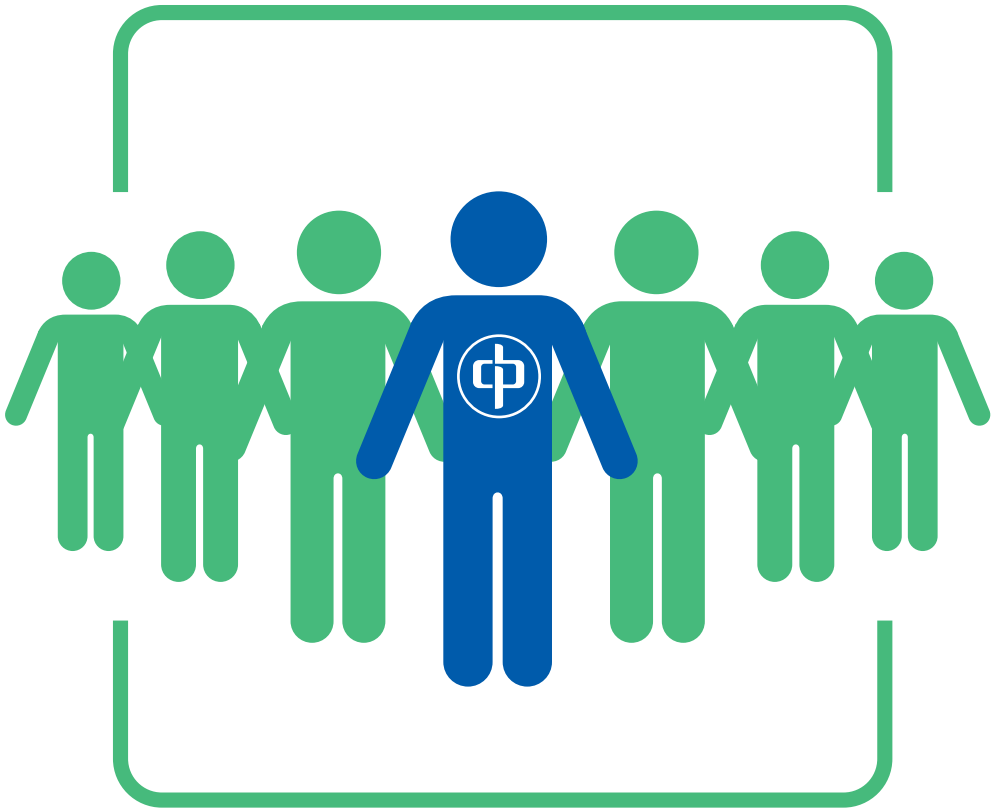
CLP Group Standards and Guidelines provide additional direction and guidance on how to implement best HSSE practice on operational locations.



THE 15 ELEMENTS

	1	HSSE Leadership
Health	2	Occupational Health and Safety (OHS) Management
Safety	3	Plant Integrity
Security	4	Security Management
Environment	5	Environmental Management
	6	Hazard Identification, Risk Assessment and Control
	7	Management of Change
	8	Personnel Training and Competence
	9	Communication and Promotion
	10	Documentation & Information Management
	11	Contractor Management and Purchasing
	12	Emergency Preparedness and Response
	13	Incident Management
	14	Performance Monitoring and Reporting
	15	Periodic Review and Improvement

HSSE Leadership



Element 1 - HSSE Leadership

Commitment to the goals of no accidents, no harm to people, and no damage to the environment must exist from top down through all levels of the organisation. Top management must lead by example, and its commitment to HSSE should be seen and felt by all employees as genuine and deep.

EXPECTATIONS

1.1 **Leadership Commitment** Vision, values and policies are in place and aligned with the Group and Region. Group and Regional Management Expectations are translated into a management system, working procedures and instructions. Periodic gap analysis is conducted against evolving Group and Regional Expectations. All HSSE regulatory requirements are compiled with.

1.2 **Clearly Defined Targets** A HSSE plan is established with clear targets, objectives, programmes, timeline, quantifiable key performance indicators (KPIs), suitable allocated resources that include sufficient HSSE professionals and budget to ensure safe operations (Ref. Element 14).

1.3 **HSSE Organisation** An effective HSSE organisation with various Committees established and one that engages people at all levels involving both partners and contractors. Roles and responsibilities, authorities and accountabilities for each position in the organisation are clearly defined, communicated, understood and implemented. HSSE professionals are provided to facilitate overall HSSE effort and give advice on HSSE matters, while responsibility for HSSE rests with line management.

1.4 **Behaviours** Managers and supervisors visibly demonstrate clear commitment to HSSE and set themselves as role models for example, they engage business partners who share similar values; they actively engage and enhance ownership and involvement from employees and contractors in HSSE matters; they demonstrate behaviours not to compromise with values while making business decisions; motivate the team through recognition; they continue to drive interdependent culture, sustainable HSSE improvements and HSSE leadership across the organisation.

Resources and References

- *CLP's Value Framework*
- *HSSE Leadership Guideline (HSSE-GUL-01-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *HSSE Leadership Programme understood by staff at multiple levels in the organisation*
- *Records of management walks and any observations made are available*
- *Regular briefings on HSSE matters are provided to both staff and Contractors*

Occupational Health and Safety (OHS) Management

Element 2 – Occupational Health and Safety (OHS) Management

Achievement of the highest level of Health and Safety performance requires careful selection, training and placement of personnel and provision of proper tools, equipment, personal protection, clear performance standards, and safe work instructions and procedures.

EXPECTATIONS

2.1 **Standards** An occupational safety and health management system is in place to meet CLP Group's safety values, expectations and goals, which is equivalent to international standards such as OHSAS18001.

2.2 **System** A safe system of work is established to ensure that personnel can perform their jobs safely and one that can meet with the work requirements and achieve regulatory compliance.

2.3 **Risk Based** A documented procedure is in place to manage the health and safety risks as identified through the organisation's risk assessment process, and be controlled through the application of appropriate risk controls (Ref. Element 6).

2.4 **Key Focus Areas**

2.4.1 **Critical Risk Standard** A process is in place to manage safety critical activities (highest risk activities in the organisation) which are intended to minimize the risk of fatalities, injuries and incidents to personnel that are engaged in generic high risk activities at CLP sites during construction and operation phase (Ref. Critical Risk Standards).

2.4.2 **Health** A system to identify occupational illness, monitor employees health and control measures for the protection of personnel is in place.

2.4.3 **No Alcohol and Drug Abuse** A system is in place to comply with the CLP's Code of Conduct on No Alcohol and Drug Abuse.

2.4.4 **Safe Working Practices** A CLP Group Guideline intended to cover the range of the expected HSSE risks likely to appear across the CLP Group, improve the quality of the working environment, prevent occupational incidents and diseases, and protect equipment and facilities.

Resources and References

- *CLP Group Occupational Safety and Health Policy Statement*
- *CLP Group Safety Principles*
- *CLP Group No Alcohol and Drug Abuse Standard*
- *Critical Risk Standards*
- *Safe Work Practices (SWP)*
- *Occupational Health and Safety Guideline (HSSE-GUL-02-001)*

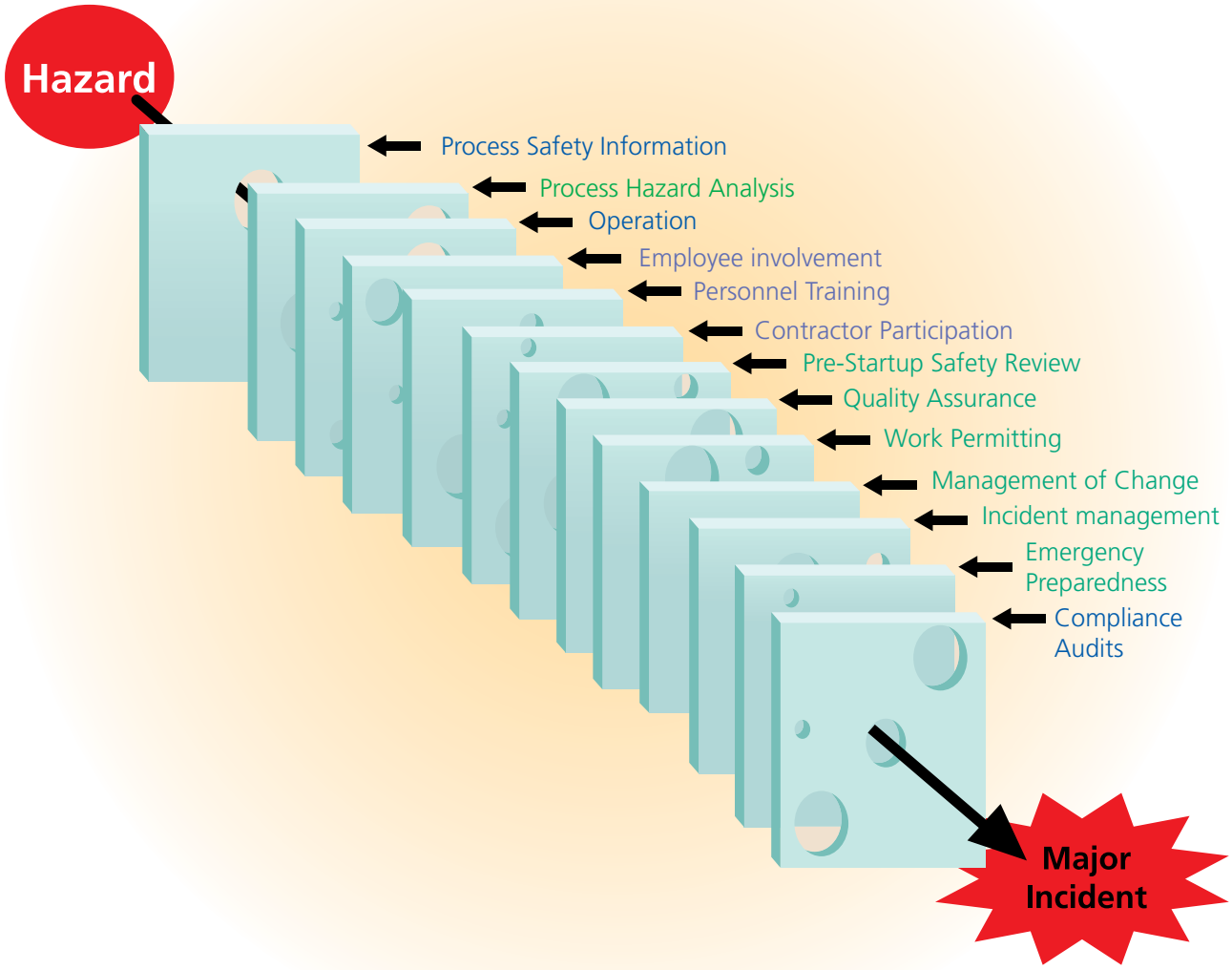
Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *OHSAS18001 certification or other internationally recognized accreditation (e.g. NOSA 5 Star)*
- *Staff records of HSSE qualifications and training*
- *Safety culture to be assessed on a periodic basis*
- *Records of PPE bought, issued to staff and contractors current stock level and intended replenishment strategy*
- *Occupational Health records for staff and contractors*

Plant Integrity



Element 3 – Plant Integrity

The integrity of our operations must be assured. All plant and equipment must be properly designed, constructed, commissioned, tested, operated and maintained. It is essential that recognized standards, appropriate procedures and effective management systems are used to build in inherent safety and to manage any HSSE risks.

EXPECTATIONS

3.1 **Standards** Plant designs are developed and implemented according to regulatory requirements, international design codes, standards, practices and procedures.

3.2 **System** Management systems and procedures for project management are documented, understood and executed by qualified personnel.

3.3 **Risk Based** Appropriate risk based assessments are required to identify process hazards and apply suitable mitigation measures to reduce any risks to an acceptable level. Safety critical systems are identified, installed, regularly tested, maintained and reviewed.

3.4 **Key Focus Areas**

3.4.1 **Design** Any deviations from specified design, standards, practices and procedures are reviewed and approved by a designated authority.

3.4.2 **Construction** Construction shall be done according to the design.

3.4.3 **Commissioning** Only approved plans and procedures shall be used for commissioning. Special attention shall be given when operating equipment under construction safety rules.

3.4.4 **SimOps** Special work procedures are developed for potentially higher risk activities that may result during Simultaneous Operations (interface risk between two or more operations).

3.4.5 **Pre-start-up Review** Prior to starting up the plant for the first time a pre-start up review shall be performed.

3.4.6 **Inspection** Operation and maintenance inspection and overhaul practices which maximize plant integrity and minimize risk are implemented.

3.4.7 **Permit to Work** A Permit to Work system shall be in place to maintain safe operations.

Resources and References

- *Plant Integrity Guideline (HSSE-GUL-03-001)*

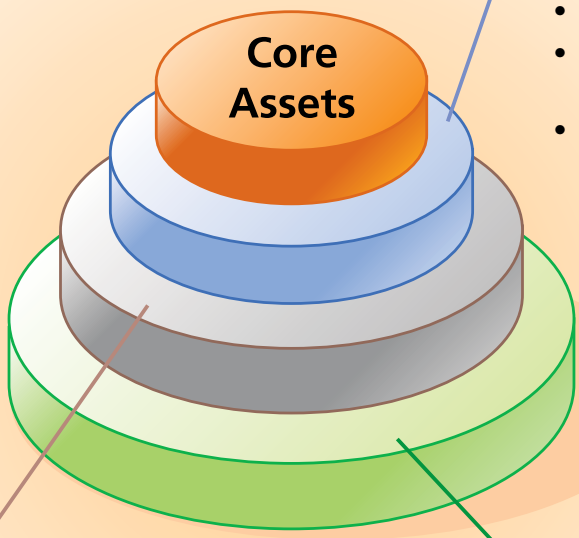
Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *A defined and planned methodology to address Plant Integrity management is in place*
- *Appropriate leading and lagging control measures for Plant Integrity are established*
- *Plant Integrity management is regularly reviewed at a Regional level*

Security Management



Inner Ring

- alert personnel
- door and cabinet
- visitor escort
- assess control devices
- emergency communications systems
- motion-activated closed-circuit television

Middle Ring

- locked doors
- receptionist
- badge checks
- access control system
- window bars
- parcel inspection
- turnstiles

Outer Ring

- lighting
- fences
- gates
- bollards
- walls
- trenches
- intrusion detection sensors
- guards on patrol and posted at property-line access poings

Element 4 – Security Management

Security management is required for protecting people, property, information and reputation against associated security risks under the management and control of respective local business units in compliance with the statutory requirements and appropriate security standards.

EXPECTATIONS

4.1 **Standards** Local and national security standards should be adopted where practicable.

4.2 **System** An effective security management system is in place to ensure adequate management controls and measures, commensurate with security risk level to protect people, property, information and reputation on a local and national level.

4.3 **Risk based** The security management system should address the identification of potential areas of loss, for development of appropriate security countermeasures in the area of people, property, information and reputation and for compliance with legal and other requirements.

4.4 **Key Focus Areas**

4.4.1 **Security Master/Response Plan** A Security Master/ Response Plan shall be developed and maintained with established objectives, threat levels definition and respective security response plans supported by local business units.

4.4.2 **Security Organisation** An effective security organisation of competent personnel is in place, with roles and responsibilities, authorities and accountabilities for each position clearly defined, communicated, understood and implemented.

4.4.3 **Training** Local security staff shall receive initial and continual training and review to ensure all of them, and, where appropriate, contractors performing security duties, are competent for their duties and fully in line with management expectations and local statutory requirement.

4.4.4 **Awareness Promotion** Appropriate security awareness promotion programme is in place for enhancing the staff's security knowledge, understanding of security issues and behaving in a manner that minimizes security risks.

Resources and References

- *Security Guideline (HSSE-GUL-04-001)*
- *CLP Group Information Security Policies*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*
- *CLP Group (IT) Portal*

Assurance and verification

- *Local security standards for industrial facilities available*
- *Third party specialist security risk reports and recommendations*
- *Security Plan for facility*

Environmental Management

Element 5 – Environmental Management

The environmental risks associated with CLP Group's operation life cycle shall be appropriately managed through compliance to both regulatory and CLP's requirements, while honouring CLP's commitments and meeting stakeholder expectations.

EXPECTATIONS

5.1 **Standards** An Environmental Management System (EMS) is in place to fulfill CLP Group's environmental values, commitments and goals. The EMS shall be in compliance with local regulatory requirements and meet relevant international standards.

5.2 **System** An effective management system is implemented to identify, manage and minimise short- and long-term environmental impacts, conduct monitoring and to continuously improve environmental performance based on best practices.

5.3 **Risk Based** A documented process is in place to identify, evaluate potential environmental risks or liabilities posed by our business. The identified risks shall be captured and managed through site specific EMS.

5.4 **Key Focus Areas**

5.4.1 Environmental key focus areas throughout a project cycle includes:

- Pre-investment Environmental Risk Assessment (PIERA)
- Air Emissions Specification
- Environmental Impact Assessment (EIA)
- Biodiversity
- Environmental Monitoring (EM)
- Environmental Management System (EMS)

5.4.2 EMS: All power related projects in which CLP has operational control are expected to operate an EMS conforming to ISO14001 or equivalent standards within 2 years from full commissioning or completion of acquisition.

5.4.3 Data Reporting: A process is in place to regularly collect and report CLP's environmental performance data on both asset- and group-levels.

5.4.4 Training: Staff to be assigned with environmental responsibilities should be given timely appropriate environmental training and be suitably qualified for their work assigned.

Resources and References

- *CLP Group Environmental Policy Statement*
- *EIA Standard (HSSE-STD-05-001)*
- *EMS Certification Standard (HSSE-STD-05-002)*
- *Power Plant Air Emissions Limits Standard (HSSE-STD-05-003)*
- *Environmental Data Reporting Standard (HSSE-STD-05-004)*
- *Biodiversity Impact Assessment Guideline (HSSE-GUL- 05-003)*
- *EM Guideline (HSSE-GUL-05-005)*

Where to find this:

- *CLP Group Operations (Environment) Portal*

Assurance and verification

- *Certification to ISO14001*
- *Staff records of HSSE qualifications and training*
- *Any non-compliance records*
- *Key environmental risks identified and suitable mitigation methods in place*
- *Environmental data collection plans and records*

Element 6 – Hazard Identification, Risk Assessment and Control

A risk management process involving the identification, assessment, and prioritization of HSSE risks shall be established. HSSE risks will be managed until they are eliminated, reduced or controlled to the point of being acceptable. Suitable monitoring and control measures to minimize the probability and/or impact of potential incidents must be in place.

EXPECTATIONS

System A system is in place to identify hazards, assess consequences and probabilities, and evaluate and implement preventive and mitigation measures to manage the risks to As Low As Reasonably Practical (ALARP).

Key Focus Areas

6.1 **Risk Register** A process is in place to ensure a risk register is established and all preventive and mitigating measures are monitored. Critical risks are reviewed by top management to ensure that they have been effectively mitigated.

6.2 **Methodologies** Established methodologies (e.g. HAZOP, What-If, LOPA, FMEA, JSA, WSWP) are used for risk identification according to the nature, magnitude and complexity of the risk.

6.3 **Evaluation** Potential hazards and risks from on-going operations and projects / products to personnel, facilities, public and environment are assessed.

6.4 **Competence** Risk assessment is conducted by competent personnel, either internal or external, including frontline workers and contractors (Ref. Element 8).

6.5 **Periodic review** Risk assessment is reviewed and updated at specific time intervals, and in the event of significant change occurring (Ref. Element 7).

6.6 **Continuous Improvement** The system includes periodic reviews for effectiveness and continuous improvement (Ref. Element 15).

Resources and References

- *Hazard Identification, Risk Assessment and Control Guideline (HSSE-GUL-06-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *An up-to-date Risk Register is available*
- *Records of Risk Assessment exist*
- *Risk mitigation, compliance and effectiveness will be determined and the extent of the compliance known*

Element 7 - Management of Change

Potential hazards will occur for any changes. It is important to evaluate and manage such changes so that new hazards are not introduced into the workplace.

EXPECTATIONS

System A system is in place to manage permanent, temporary and emergency changes. It can be physical changes, process changes, procedure changes or others including design, engineering process, material, protection system, organisation and staffing, operating outside normal limits, operating and maintenance procedures, technical codes, regulatory, etc.

Key Focus Areas

7.1 **Scope** Changes no matter how small shall be considered, reviewed, and approved.

7.2 **Process** The management of change process shall be well defined in the written procedure. This shall be made available and communicate to all relevant employees and contractors.

7.3 **Risk Identification** Proper risk assessment shall be conducted to identify the risk associated in the change. Mitigations measures are required to mitigate the risk (Ref. Element 6).

7.4 **Regulatory Compliance** A system should be in place to identify any change in legal or regulatory requirements. It shall be reviewed that the proposed change is in compliance with regulatory requirements.

7.5 **Competence** Personnel in position authorized to make decisions regarding change must be trained and competent to do so (Ref. Element 8).

7.6 **Documentation** All the changes must be properly documented and the related information shall be easily retrieved if necessary (Ref. Element 10).

7.7 **Communication** All the changes must be communicated to relevant employees and contractors (Ref. Element 9).

Resources and References

- *Management of Change Guideline (HSSE-GUL-07-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Review the change register and process*
- *Tracking the status of closure*

Element 8 - Personnel Training and Competence

Ensuring safe operations is essential, an important part of this is that personnel will only be asked to do work for which they are capable and competent of handling. This requires the careful selection, placement, training, ongoing competency assessment and authorization of employees, with third party independent assessment where appropriate.

EXPECTATIONS

System A system is in place to identify and deliver the training necessary to ensure individual competence and knowledge to understand the hazards, risks and control measures associated with their work.

Key Focus Areas

8.1 **Competence** Competence requirements are formally determined, assessed and recorded.

8.2 **Training Needs** Training needs (skills, knowledge and competence assessment) are identified, reviewed to reflect changes and delivered to fill the gap.

8.3 **Authorisation** An appropriate level of trained and authorised personnel and supervisors are maintained to ensure the safety of personnel, integrity and security of the plant and the minimization of risk to the environment.

8.4 **Induction** Suitable site induction processes shall be provided to all new employees and contractors. Such an induction process shall seek to build a common culture in the workforce that recognises the importance of HSSE.

8.5 **Records** Training plans, modules, competency assessment and authorisations are recorded for all personnel. Records shall be maintained to meet the expectations.

8.6 **Continuous Improvement** Training shall be regularly reviewed and its effectiveness assessed for quality improvement and against current industry best practice.

Resources and References

- *Personnel Training and Competence Guideline (HSSE-GUL-08-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Comprehensive site induction training programme is in place*
- *Competence and behaviors are regularly assessed and monitored*
- *Contractors are to provide competent workers and regularly assess and monitor their competence and behaviors*

Element 9 – Communication and Promotion

Effective, transparent and open communication is maintained internally and with stakeholders associated with the company. HSSE promotion needs to be communicated to increase awareness and to create a culture that seeks excellence in HSSE performance.

EXPECTATIONS

System A system is in place to establish and maintain both internal and external communication on key HSSE information and issues vertically and horizontally (including employees, contractors, community and other key stakeholders).

Key Focus Areas

9.1 **Communication** Two way communication mechanism and various platforms are in place to ensure effective communication, and to be reviewed periodically.

9.2 **Information Sharing** Information, learning and best practices should be shared effectively across the organisation or externally and should be managed appropriately.

9.3 **Promotion** Promotion of HSSE expectations and sharing of HSSE messages and information across the organisation including contractors.

9.4 **Equipment** Proper equipment or media should be used for communication, sharing and promotion of HSSE.

9.5 **Stakeholders** Communication with relevant stakeholders is expected periodically.

Resources and References

- *Communication and Promotion Guideline (HSSE-GUL- 09-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Open and proactive communications are established with Employees, Contractors*
- *Relevant stakeholders are engaged through a formal process*

Element 10 - Documentation & Information Management

Accurate and current information regarding potential HSSE hazards and regulatory requirements is required to be accessible to the personnel who will be responsible for conducting the work. This is essential if the risk is to be accurately assessed and managed. Suitable systems and processes need to be in place to ensure accurate and timely information is made available at the point where it is needed.

EXPECTATIONS

System A system is in place to manage essential HSSE related information such as Critical Risks Standards, Safe Work Practices and Material Safety Data Sheets.

Key Focus Areas

10.1 **Reporting** Reports should be provided in a timely manner, structured, providing clear, correct and consistent information (Ref. Element 14).

10.2 **Accessibility** Information, printed or electronic copies, is kept available, accessible and up to date with essential master copies and back-ups, at identified places, including websites, network servers, computer hard disks and / or library.

10.3 **Records** The system should clearly identify the personnel with responsibility for each document and the document's retention period. Documents should be clearly identified, available, accessible, accurate, revision controlled and appropriately safeguarded.

Resources and References

- *Documentation and Information Management Guideline (HSSE-GUL-10-001)*
- *CLP Group Information Security Policies*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*
- *CLP Group (IT) Portal*

Assurance and verification

- *Documentation and information management will be reviewed regularly to ensure compliance and business efficiency*

Element 11 - Contractor Management and Purchasing

Contractors working on behalf of CLP Assets and Joint Venture Companies may impact on HSSE performance, reliability of operations and reputation. It is essential that they perform their work in a manner that is consistent and compatible with CLP values, policies and standards.

EXPECTATIONS

System A system is in place to prequalify, evaluate, select, control and measure the HSSE performance of contractors and suppliers to ensure they are aligned with CLP's values, key policies and HSSE performance expectations.

Key Focus Areas

11.1 **Partnering** A cooperative approach is intended to be used to ensure that excellent HSSE performance is achieved by working closely with CLP on all items related to HSSE.

11.2 **Pre-qualification** A system is in place for pre-qualification of contractors and suppliers to ensure that they are experienced and capable to achieve CLP's expectations.

11.3 **Evaluation and Selection** A system is in place to evaluate and select contractors and suppliers on the basis of their ability to embrace CLP's values, their technical capability, demonstrated HSSE performance and compliance with statutory obligations. And to determine any support required to be provided by CLP.

11.4 **Project HSSE Plan** The HSSE responsibilities of each party are defined and understood at the commencement of the work and a plan is in place to reinforce this as the work progresses.

11.5 **Control** Suitable site access control is provided for personnel access. Site induction training (typically includes; HSSE Standards, site safety rules and actions in the event of an emergency), specialist skill training and checks to ensure that all contractors and CLP personnel understand their responsibility to work safely and to look after the safety of others (Ref. Element 8).

11.6 **Performance Monitoring** Team (contractor and CLP) HSSE performance is monitored and performance improvement through partnering is encouraged. A post contract evaluation is conducted to assess the level of success and identify any lessons learnt (Ref. Element 14).

Resources and References

- *CLP Group Responsible Procurement Policy Statement*
- *Contractor Management and Purchasing Guideline (HSSE-GUL-11-001)*

Where to find this:

- *CLP's Value Framework*
- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Contractor selection process to include evaluation of HSSE performance*
- *Regular review and audit the HSSE performance of contractors*
- *Understand and benchmark the contractor's HSSE performance*

Element 12 – Emergency Preparedness and Response

Emergency preparedness and response are essential to ensure that, in the event of an incident, all appropriate actions are taken to minimize the impacts on staff, third party personnel, public, environment, and company assets.

Public confidence in the integrity of our operations is important. Maintaining contact with the community during an emergency event is a key factor in retaining this confidence.

EXPECTATIONS

System A system is in place to manage emergencies at Group, Regional and Asset levels. Potential emergency response events are identified and suitable response plans developed. These should address all possible scenarios and threats, be properly documented, and are easily accessible, clearly communicated and regularly updated.

Key Focus Areas

12.1 **Resources** A structure is in place with roles and responsibilities, communication links, activation mechanism, and mobilisation requirements clearly defined. Emergency staffing by trained staff shall include suitable backup/reserves.

12.2 **Drills** Exercises are regularly conducted to ensure emergency preparedness. Drill performance is monitored and evaluated for continuous improvement.

12.3 **Communication** An appropriate communication plan is established to communicate the emergency information. It is required to be updated regularly, covering both the internal and external interfaces liaison.

12.4 **Media** To support the effective management of Emergency Preparedness, effective voice and data communication links should be established between assets, regions and the Group.

12.5 **Equipment** Appropriate emergency equipment and facilities are available and maintained in the assets.

12.6 **Community** The business should be accepted as an important member of the community and acknowledged for its commitment to safety, health, security and the environment. Any community concerns should be dealt with promptly and efficiently. Information should be shared with the community as appropriate.

Resources and References

- *Emergency Preparedness and Response Guideline (HSSE-GUL-12-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Plans, procedures and resources are in place to effectively respond to emergency*
- *Conduct exercises regularly and record the outcomes and feedback for improvement*

Element 13 – Incident Management

A sound HSSE management programme includes a system for reporting, investigating and sharing lessons learnt. This is important to prevent recurrence of similar incidents. An effective incident management system provides the opportunity to learn from reported incidents. This is necessary to achieve continuous improvement in HSSE performance.

EXPECTATIONS

System A system is in place to ensure the timely reporting, investigating and documenting all HSSE incidents, including significant near misses. Sites should encourage incident reporting using an "enquiring, learning and just culture." Incident reporting should be done in accordance with the Group Incident Management Standard.

Key Focus Areas

13.1 **Incident Management Standard** A process is in place to manage all HSSE incidents in the organisation which is intended to set out the minimum requirements for the implementation and maintenance of a safety incident management system including regulatory requirements.

13.2 **Legal reporting** Region based incident reporting procedures should be based on Group Standards but modified to include any relevant local legal requirements. A system should be used such as the Group Safety Information System (GSIS) to capture all the incidents and corrective actions.

13.3 **Incident Investigation Standard** The importance of an incident investigation is to ensure that appropriate and competent incident investigation team is formed to identify the cause of incident. In the event of a major incident (for severity level 3), the CLP Group Accident Investigation Panels and Investigation Report Format Standard should be followed.

13.4 **Timely completion** Incident investigations should be initiated and completed in a timely manner. Investigation results should be carefully analyzed to identify the root cause(s) and any contributing factors.

13.5 **Documented** Incident and investigation reports are to be recorded and documented, and any required follow up actions are tracked to closure.

13.6 **Lessons learned** A system should be in place to share any lessons learnt with staff and contractors and also across the CLP organisation.

Resources and References

- *Incident Management Standard (HSSE-STD-13-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*
- *CLP Group Safety Information System (GSIS)*

Assurance and verification

- *Record the incident and investigations*
- *To make sure the actions are closely monitored.*
- *Conduct incident sharing to avoid re-occurrence*
- *Analysis of root causes*

Element 14 – Performance Monitoring and Reporting

To improve HSSE performance and process, it is essential that appropriate Key Performance Indicators (KPI) are established, communicated and understood throughout the organisation.

EXPECTATIONS

System A system is in place to provide clear goals and objectives for HSSE plans, and performance indicators are evaluated against these goals and objectives. This should enable regions to be more aligned with each other on what the boundaries are with regards to meeting the requirements.

Key Focus Areas

14.1 **Safety Performance Monitoring and Reporting Standard** A process is in place to set out the requirements of safety data reporting, and third-party verification for the purposes of external and internal reporting. Also utilise lagging and leading indicators appropriately to show the trends which may require more attention in order to prevent an incident from taking place (Ref. Element 2).

14.2 **Environmental Data Reporting Standard** A process sets out the requirements and provides general guidance on CLP's environmental data reporting, internal control, and third-party verification for the purposes of external reporting (e.g. CLP's Sustainability Report), internal reporting and tracking of environmental risks on both entity and group levels (Ref. Element 5).

14.3 **Evaluation** Performance evaluated to assess the degree to which goals and objective are met, and analysed for the need of corrective actions and preventive actions.

14.4 **Business Linkage** HSSE performance is linked to both the facility's and individual's performance measurement.

14.5 **Reporting Structure** Appropriate HSSE performance data should be agreed and discussed with workforce for driving HSSE performance improvement. Data submission should be collected and reported to related Group function.

14.6 **Approval Process** Each established KPI is required to be input into the IT system for approval.

Resources and References

- *Performance Monitoring and Reporting Standard (HSSE-STD- 14-001)*
- *Environmental Data Reporting Standard (HSSE-STD-05-004)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Goals, objectives and targets should be established and measured*
- *Performance should be measured monthly*
- *Regional reporting should be made using GSIS*

Element 15 – Periodic Review and Improvement

Excellence in HSSE performance can only be achieved if we are organised in a planned and systematic way, which comply with local regulatory requirements. Site based HSSE systems should be based on the CLP Group HSSE Management System Standards, the Group Critical Risk Standards and relevant Group Environmental Standards.

EXPECTATIONS

System A system is in place for periodic internal and external audits and reviews to evaluate the performance and effectiveness of the existing HSSE Management System.

Key Focus Areas

15.1 **Annual HSSE Plans** An annual HSSE improvement programme shall be developed, approved and communicated to staff and contractors (Ref. Element 1).

15.2 **Self-assessment and third party audits** Key to the successful implementation of the HSSE system is the requirement for Assets to carry out annual self-assessments and independent third party compliance audits (ISO14001 and OHSAS18001 if applicable) to ensure that they have effective HSSE systems in place.

15.3 **Regulatory** In certain circumstances local regulators may also require specialist audits to be carried out (e.g. Major Hazardous Facilities).

15.4 **Peer Review** This review is intended to supplement the Self-Assessment and Third Party Audit processes. The process is designed to share best practices in HSSE across the Group but also provides a degree of assurance that Standards are being met and that improvement in HSSE processes are being made over time.

15.5 **Competency** Reviewers and Auditors are trained and competent to carry out the review / audit.

15.6 **Improvement** Processes are regularly reviewed for continuous improvement. Recommendations are implemented on agreed timescale and the progresses are being monitored regularly.

Resources and References

- *Periodic Review and Improvement Guideline (HSSE-GUL-15-001)*

Where to find this:

- *CLP Group Operations (Safety and Health) Portal*

Assurance and verification

- *Annual HSSE Self Assessments*
- *HSSE third party audits*
- *Regular HSSE Audits and Approvals*
- *Regular Peer Reviews (every 3 to 4 years) are conducted to ensure the continuing suitability, adequacy and effectiveness of the HSSE system*
- *HSSE Peer Review Protocol*

Interpretation of the HSSE Management System Standard and other queries

Advice regarding interpretation of the expectation can be referred to the related Standards and Guidelines. In addition, the Company values the input of every employee on matters related to the HSSE Management System Standard. If you have any queries concerning any aspect of the HSSE Management System Standard, please do not hesitate to contact CLP Holdings (Group Operations) directly.

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