

HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT MANUAL

**HEALTH, SAFETY
AND
ENVIRONMENTAL MANAGEMENT MANUAL**



Consolidated Construction Consortium Ltd

In Compliance with

OHSAS 18001: 2007

&

ISO 14001:2004

0.1 MANUAL CONTROL PAGE

**HEALTH, SAFETY
AND
ENVIRONMENTAL MANAGEMENT MANUAL**

HSE MANUAL Rev. No. 2	Date : 02-09-2011
ISSUED BY	HEAD – HSE
ISSUED TO	

PREPARED BY : HEAD - HSE	APPROVED BY : DIRECTOR - OPERATIONS
SIGNATURE 	SIGNATURE : 
NAME : S N NARAYANAN	NAME : V G JANARTHANAM

0.2 TABLE OF CONTENTS

HSE Manual Ref.	Title	Revision Status	
		Rev. No.	Date
0.1	Manual Control Page	2	02-09-2011
0.2	Table of Contents	2	02-09-2011
0.3	Record of Revisions	2	02-09-2011
0.4	Organization Profile	0	16-04-2008
0.5	Adequacy Matrix	1	02-09-2011
1.0	Scope	0	16-04-2008
2.0	References	0	16-04-2008
3.0	Terms & Definitions	0	16-04-2008
4.0	HSE Management System	0	16-04-2008
4.1	HSE Management System at CCCL	0	16-04-2008
4.2	HSE Policy	0	16-04-2008
4.3	HSE Planning	2	02-09-2011
4.4	Implementation & Operation	1	20-03-2009
4.5	Checking & Corrective Action	0	16-04-2008
4.6	Management Review	0	16-04-2008

0.3 RECORD OF REVISIONS

HSE Manual Section Ref.	Rev. No.	Date	Brief Record of Revision
4.4 (Implementation and Operation)	1	20-03-2009	In section 4.4 for positions, accountability included.
4.3 HSE Planning	1	10-03-2010	In section 4.3.3 for Objectives and Targets
4.3 HSE Planning	2	02-09-2011	Earlier section 4.3.1A and 4.3.1B combined as 4.3.1

0.4 ORGANIZATION PROFILE

CCCL is a professionally managed civil construction company started in 1997 by young and highly talented engineering professionals.

The company is managed by highly dedicated young technical and commercial team backed by a strong dynamic leadership of Mr. S. Sivaramakrishnan, Managing Director under the able guidance and support of Mr. R. Sarabeswar, Chairman & CEO.

The CCCL team has professionals in all the key areas of construction as follows.

- Design
- Project Management Services
- Execution of Projects
 - a) Major Housing Complexes
 - b) Industrial Structures
 - c) Commercial Complexes
 - d) Airport Complexes
 - e) Waste water treatment plants
 - f) Long span Pre-cast Concrete Structures
 - g) Retro fitting

Execution of Pre-engineered buildings

CCCL has every capability to undertake large turnkey projects. Besides on-site computerized monitoring, a comprehensive control over all projects through link-up with a central server at regional centre guarantees fluent progress of projects at all times.

In last 10 years CCCL has built more than 300 buildings and structures for various clients in different part of India which are monuments and stand as testimony to the ability of CCCL.

A few of the technical achievement of CCCL are given in below :

- Largest Post Tensioned Structure in India
- Longest Portal Frame Structure in India
- Best of its class in Large Turnkey Operations

- First International Convention Center in Mangalore
- Biggest Dome Structure in Asia and Second Largest in the World
- Largest Single Shell Hyperbolic Parabolic Structure in India
- First Platinum Rated Green Building in the World by the US green Building Council

CCCL has received many accolades and has been conferred with many awards for its stellar performance in building industry from various Government agencies & corporate clients.

CCCL has been awarded ISO 9001-2000 certification by BVCI for implementation of the Quality Management System to meet the high standards of quality and enhance customer satisfaction.

CCCL has emphasized safety of all its employees and others working in the project sites by framing the HSE policy and is fully committed to address all areas to provide and maintain healthy and safe working environment to its employees and others working in project sites.

THE PRODUCT DIVISIONS

Mechanical and Electrical Division

Our M&E Division is primarily responsible for the management and execution of electrical, mechanical, plumbing, heating, ventilation and air-conditioning works at project locations. This division has been providing its services for projects that we construct and is proposing to commence the provision of services for projects which it tenders independently. This division also provides consultancy and execution services for various contract works. These services are typically provided at a fixed rate per square foot. In addition to providing and implementing electrical, mechanical, plumbing and air-conditioning works, the M&E division also provides design, estimation and procurement services.

Consolidated Interiors Limited (CIL)

Our Subsidiary, CIL is engaged in the provision of interior contracting and fit out services for our own projects and to a range of third party public and private sector clients. It was formed as a result of a goodwill agreement entered into between our Company and Trendtech CDAC, an entity engaged in providing interior contracting services.

Building Products Division

Our Building Products Division consists of batching plant for production of ready mixed concrete and manufacturing facility for production of building blocks. We have 12 batching plants engaged in the production of various grades of ready mixed concrete at various locations in India. Our batching plants are located to our various project locations depending on demand and have operated in locations like Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra and Chandigarh.

Software Designs Department (Yuga Design)

Yuga Design is our in house software design division which provides integrated software based engineering design services to a variety of domestic and international clients including large engineering companies and to prominent architects.

Glazing Solutions

To date we have been providing glazing solutions as part of our turn-key construction services to various clients through third party service providers. In order to improve our scheme of concentric integration we have begun the process of incorporating Noble Consolidated Glazings Limited with the object of providing glazing solutions in-house.

The key factors for success of the company lies in three values of being **Creative, Committed and Customer Focused.**

To respond quickly and cater to customer requirements, CCCL has expanded its business and has set up regional offices at Chennai, Bangalore, Hyderabad, New Delhi, Pune, Kolkatta and Thiruvananthapuram.

0.5 ADEQUACY MATRIX

OHSAS 18001 & ISO 14001 Cl. Ref	HSEM Ref.	Title	2nd Level Documents
-	0.1	Manual Control Page	-
-	0.2	Table of contents	-
	0.3	Records of Revisions	
-	0.4	Organization Profile	-
-	0.5	Adequacy Matrix	-
1.0	1.0	Scope	-
2.0	2.0	References	-
3.0	3.0	Terms and definitions	-
	3.1	Glossary of Terms	-
	3.2	Abbreviations	-
4.0	4.0	Health, Safety & Environmental Management System	-
4.1	4.1	General Requirements: Scope of Health, Safety & Environmental Management System at CCCL	-
4.2	4.2	Health, Safety & Environmental Policy	-
4.3	4.3	HSE Planning	-
4.3.1	4.3.1	Procedure for Identification of Environmental Aspects, Hazards, Evaluation of Impacts, Risks & Determination of Control Measures	<u>CSP-4.3.1</u>
4.3.2	4.3.2	Legal & Other Requirements	<u>CSP-4.3.2</u>
4.3.3	4.3.3	HSE Objectives & Targets and Management Program	<u>CSP-4.3.3A</u> <u>CSP-4.3.3B</u>
4.4	4.4	Implementation & Operation	-
4.4.1	4.4.1	HSE Organization Structure: Resources, Roles, Responsibility, Authority & Accountability	-

OHSAS 18001 & ISO 14001 Cl. Ref	HSEM Ref	Title	2nd Level Documents
4.4.2	4.4.2	Competence, Training and Awareness	CSP-4.4.2
4.4.3	4.4.3	Consultation, Participation & Communication	CSP- 4.4.3
4.4.4	4.4.4	HSE Documentation	-
4.4.5	4.4.5	Control of Documents	CSP- 4.4.5
4.4.6	4.4.6	Operational Control	CSP- 4.4.6
4.4.7	4.4.7	Emergency Preparedness and Response	CSP- 4.4.7
4.5	4.5	Checking & Corrective Action	-
4.5.1	4.5.1	Performance measurement & monitoring	CSP- 4.5.1
4.5.2	4.5.2	Evaluation of Compliance	CSP- 4.5.2
4.5.3	4.5.3	Incident Investigations, Non Conformity, Corrective Action & Preventive Action	CSP- 4.5.3
4.5.4	4.5.4	Control of Records	CSP-4.5.4
4.5.5	4.5.5	Internal Audit	CSP-4.5.5
4.6	4.6	Management Review	-

1.0 SCOPE

Health, Safety and Environmental Manual details the Health, Safety and Environmental management system of Consolidated Construction Consortium Limited in meeting the requirements of:

OHSAS 18001: 2007 Occupational Health and Safety
Management Systems – Requirements

ISO: 14001: 2004 Environmental Management Systems –
Requirements with guidance for use.

CCCL Management has opted for Third Party Certification process and towards this the documentation has been prepared for compliance.

**The effective date of implementation
of this manual is from 16-04-2008.**

1.1 Safety and Health Guidelines

Work safety, improvement of health, and environmental protection matters are important aspects of our entrepreneurial business activities. Consequently the Board of Directors supports all measures to upgrade work safety and the health of our workforce.

Accidents and health risks can be totally or at least partially avoided if risks and dangers will be managed and countered by an organised implementation of safety measures.

These include in particular:

- a) a clear assignment of authorities, responsibilities and accountabilities.
- b) full attention, without any compromise, to safety & Environmental standards, the use of technical safety installations and personal protective equipment by our employees and
- c) continuous on the job training of all personnel

To promote work health, safety & environmental improvement is one of the predominant tasks of each Manager. The prevention of accidents on the basis of efficient safety measures is an indispensable proof of qualification.

It is, however, only through planned co-operation of all group and company employees that these guidelines can be successfully applied in practice in order to further enhance work safety and health issues of our workforce.

The Board of Directors of CCCL considers health, safety & environment a decisive prerequisite and to also improve our company's financial performance.

2.0 REFERENCES

- | | | |
|------------------|---|---|
| OHSAS 18001:2007 | - | Occupational, Health and Safety Management Systems – Requirements. |
| OHSAS 18002:2000 | - | Occupational, Health & Safety Management Systems - Guidelines for the implementation of OHSAS 18001. |
| ISO 14001 - 2004 | - | Environmental Management Systems - Requirements with guidance for use. |
| ISO 14004-2004 | - | Environmental management systems – General guidelines on principles, systems and supporting techniques. |

Laws and Regulations related to HSE (Detailed in Register of Regulations)

3.0 TERMS & DEFINITIONS

3.1 Glossary of Terms

As described in OHSAS 18001: 2007 and in ISO 14001: 2004 Standards

3.2 Abbreviations

CCCL	-	Consolidated Construction Consortium Ltd
CEO	-	Chief Executive Officer
CSF	-	CCCL Safety Format
CSP	-	CCCL Safety Procedure
DO	-	Director – Operations
DMR	-	Deputy Management Representative
EMP	-	Environmental Management Program
HO	-	Head Office
HSE	-	Health, Safety and Environment
HSEM	-	Health, Safety and Environmental Manual
HSEMS	-	Health, Safety and Environmental Management System
HOD	-	Head of the Department
HSMP	-	Health & Safety Management Programme
IA	-	Internal Audit
ISO	-	International Organization for Standardization
LC	-	Legal Concern
MD	-	Managing Director
MR	-	Management Representative
NCR	-	Non Conformity Report
OCP	-	Operational Control Procedure
OH&S	-	Occupational Health & Safety
PC	-	Project Coordinator
PIC	-	Project In-charge

PM	-	Project Manager
PPE	-	Personal Protective Equipment
RM	-	Regional Manager
RO	-	Regional Office
ROR	-	Register of Regulations
RSH	-	Regional Sector Heads
RSC	-	Regional Safety Coordinator
SE	-	Safety Engineer
SH	-	Sector Heads
SS	-	Safety Supervisor
SSC	-	Sector Safety Coordinator

4.0 HEALTH, SAFETY ENVIRONMENTAL MANAGEMENT SYSTEM

4.1 General Requirements: Scope of Health, Safety Environmental Management System at CCCL

The scope covers

“All activities related to Engineering, Procurement and Construction services for Buildings, Industrial Structures and Infrastructure projects”

This system encompasses all activities performed at Head Office, Regional offices and Construction Project Sites connected with Regional Offices.

This HSE management system aims to eliminate or minimize impacts/risks associated with its activities and covers all employees (Including employees engaged by sub-contractors) and other interested parties.

The activities are systematized with respect to OHSAS: 18001-2007 & ISO 14001:2004, this HSE Manual is prepared and implemented for achieving continual improvement on 'Health and Safety Management System performance'.

4.2 HSE POLICY

CONSOLIDATED CONSTRUCTION CONSORTIUM LTD

HEALTH, SAFETY AND ENVIRONMENTAL POLICY

Consolidated Construction Consortium Limited (CCCL) is a professionally managed company engaged in Engineering, Procurement and Construction services. The CCCL management recognizes Health, Safety and Environment as among the highest goals and objectives.

The Management is fully committed to:

- Comply with all applicable legal and other requirements connected with Occupational Health, Safety and Environmental matters, including customer specific requirements.
- Practice Pollution Prevention methods, wherever feasible and work towards prevention of injury and ill health in construction activities.
- Create awareness on Occupational Health, Safety and Environment by team work, training and meaningful communication of the HSE policy to employees, persons working on behalf of the organization and relevant interested parties.
- Achieve customer satisfaction through planned objectives & targets and continual improvement in HSE performance.

Date: 16.04.08

Place: Chennai

Sd/-

R. Sarabeswar

Chairman and CEO

4.3 HSE PLANNING

4.3.1 Identification of Environmental Aspects, Hazards, Evaluation of Impacts, Risks & Determination of Control Measures

Significant Aspects and Major Risks associated with the activities at all construction project sites, Head Office and Regional Office are identified considering

- Emissions to air
- Releases to water
- Waste Management
- Land Contamination
- Raw materials usage & natural resources and covering
- Routine & Non routine Activities
- Activities of all personnel having access to work place Viz. Workers of sub-contractors and visitors
- Facilities provided and
- Procurement of Equipment and Materials

The impacts are evaluated based on their Quantum, Severity, and Probability & Duration, Resource Conservation Potential, Legal & Other Requirements, Interested Party Concern and Emergency.

The risk assessment associated with the identified hazards is carried out based on probability of occurrence & severity of the hazard impact

Refer [CSP-4.3.1](#) **“Procedure for Identification of Environmental Aspects, Hazards, Evaluation of Impacts, Risks & Determination of Control Measures.”**

Head - HSE management ensures to consider the information as a result of identification of aspects having significant impact and identification of hazards based on risk assessment in setting up “Objectives & Targets” for Occupational Health & Safety Performance.

4.3.2 Legal & Other Requirements

CCCL considers the following for identifying Legal and Other Requirements applicable, for Safety, Health and Environmental Management.

- Site-specific requirements such as operating permits.

- Industry specific requirements
- Applicable Legal & Other requirements
- Any other requirements based on authorizations, agreements, Contracts and permits
- CCCL Policy guidelines.

CCCL identifies, updates and communicates these “Legal & Other Requirements” as per “Procedure for Identification of Legal & Other Requirements”.

Refer [CSP- 4.3.2](#) “Procedure For Identification of Legal & Other Requirements.”

4.3.3 HSE Objectives & Targets and Management Programmes

CCCL considers the following for setting “Objectives and Targets”

- a) Legal requirements
- b) Risks associated with Occupational Health & Safety Hazards.
- c) Significant Environmental Aspects & Impacts
- d) Views of Interested Parties.
- e) CCCL-HSE Policy Guidelines (Other Requirements).
- f) Financial / Operational / Business related / Technological options.

CCCL sets these objectives & targets consistent with HSE policy.

Refer [CSP-4.3.3A](#) “Procedure for Setting Objectives and Targets”

Company – wide objectives and targets are

- a) Power consumption reduction 2% every year
- b) Frequency Rate reduction 5% every year
- c) Shuttering/Scaffolding Material damage reduction 2% every year
- d) Steel scrap reduction 2% every year.
- e) Cement wastage reduction 2% every year.
- f) Achieve safety training coverage to 20% of total manpower in a year.

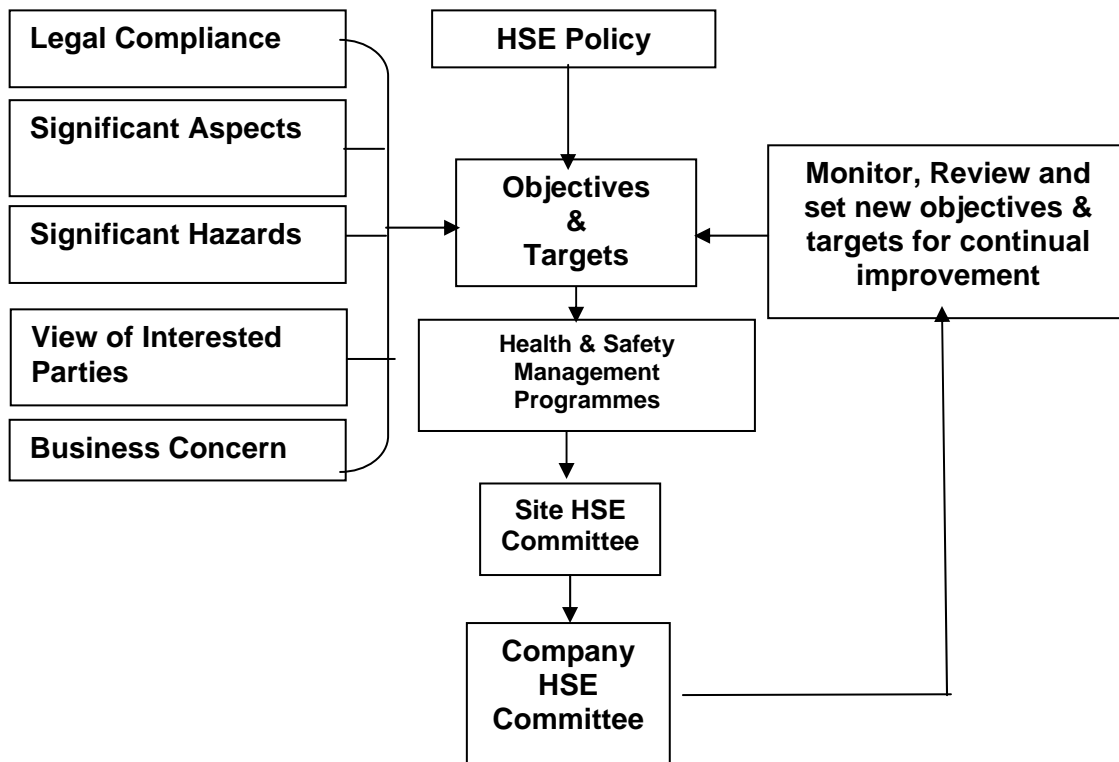
Management Programmes

CCCL Site management prepares Health & Safety Management Programme (HSMP) and Environmental Management Program (EMP) for achieving its "Objectives & Targets" set for Occupational Health & Safety Performance at respective sites. These programs indicate responsibility, resources needed and time frame by which these are to be achieved.

CCCL prepares new HSMP / EMP to meet the new development or modified activities specific to the project sites

Refer [CSP-4.3.3B](#) "Procedure for Health & Safety Management Programme and Environmental Management Program"

The Overall HSE Planning is detailed in the flow diagram below

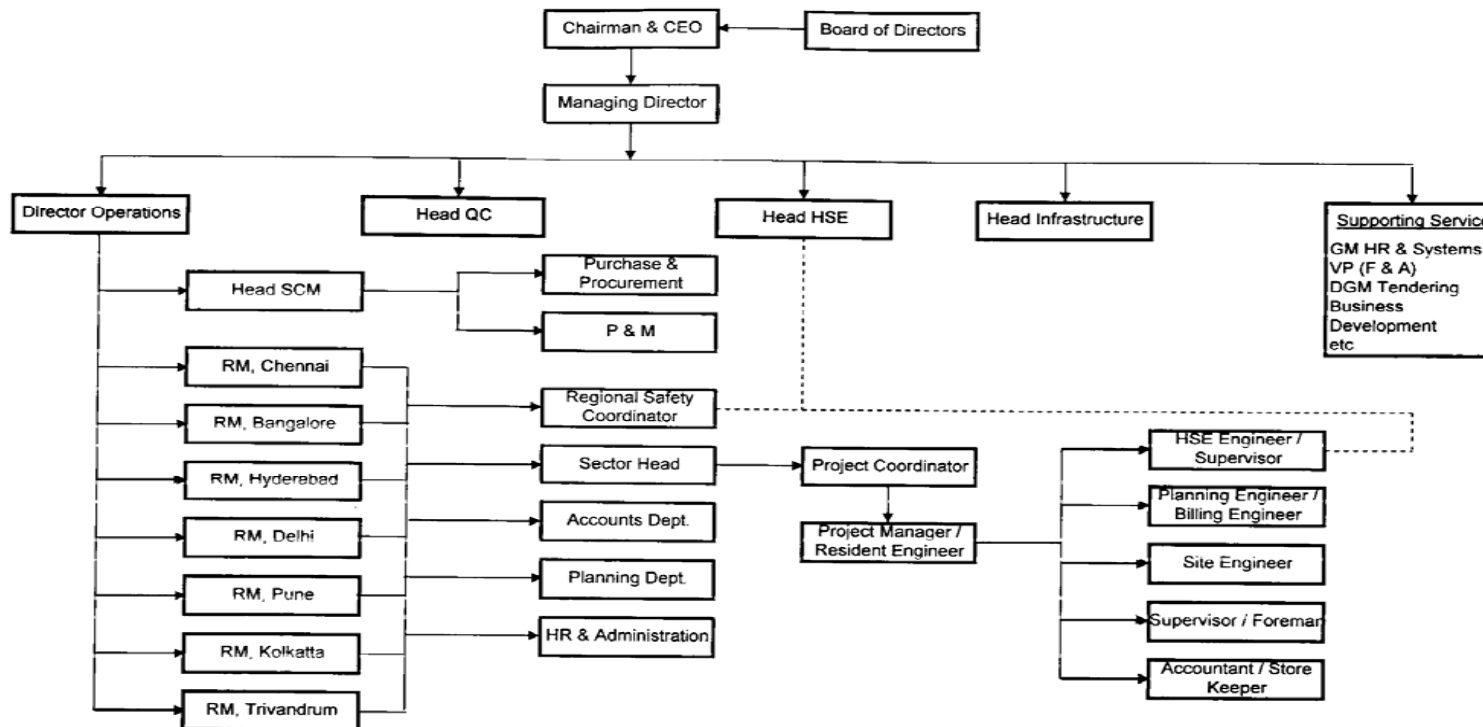


4.4 IMPLEMENTATION & OPERATIONS

4.4.1 HSE Organization Structure: Resources, Roles, Responsibility, Authority and Accountability

CCCL has set up an organization structure for implementing and to continually improve HSE performance

CCCL - HSE ORGANISATION CHART



RESPONSIBILITIES , AUTHORITIES AND ACCOUNTABILITIES

Responsibilities, authorities of personnel who manage, perform and verify HSE activities are as detailed below.

Managing Director

MD is the Chairman of the Company HSE Management Committee and is responsible for periodical reviews of company level HSE management and to provide necessary resources.

Regional Manager/Regional Sector Manager

RM/RSH is the member of the Company HSE Management Committee is responsible and accountable for review and implementation of HSE management for all the sites under his control and provides necessary resources.

Head - HSE

Head – HSE is the Management Representative (MR) is overall responsible, and assisted by Deputy Management Representative (DMR), for:

- a) Ensures the HSE management system requirements are established, implemented and maintained
- b) Conduct Company HSE Management Committee meetings periodically.
- c) Presents the summary of performance on HSE management at sites to HSE management committee, including recommendations for improvement.
- d) Communicates the Health, Safety and Environmental policies to all employees.
- e) Issue necessary directives to Regional Safety coordinators and render advice to the Project manager, as required.
- f) Monitor and assess HSE measures of Sites/Region and fix accountability on Sector Heads, Project in Charges towards non- compliance of HSE requirement and HSE performance.
- g) Compile Corporate Accident Statistics.

Regional Safety Coordinator

- a) Ensures the HSE management system requirements are implemented and maintained
- b) Conduct Company Regional HSE Management Committee meetings periodically.
- c) Presents the summary of performance on HSE management at sites to Regional HSE management committee, including recommendations for improvement.
- d) Communicates the Health, Safety and Environmental policies to all employees.
- e) Render assistance to the Regional Managers in formulating and adhering to the client's contract health, safety and environmental plan, in line with the HSE policy of CCCL and the requirements of the activities of the contract.
- f) Issue necessary directives to Safety Engineers and render advice to the Project manager/Project In-Charges, as required.
- g) Monitor and assess HSE measures of the Sites and fix accountability to the Project in-charges/Project Engineers for the non-compliance of HSE requirement.
- h) Investigating all serious accidents to reinforce the safety programme or the code of practice itself.
- i) Formulate new safety measures required for the Project.
- j) Compile Regional Accident Statistics.

Safety Engineer / Supervisor

- a) Ensure that supervisors and workers have received the necessary / required HSE Induction training.
- b) Conduct regular HSE inspection at sites.
- c) Monitor Toolbox talks conducted by Project Engineer/ Supervisor

- d) Conduct Toolbox meetings at area level. (Tool Box Talk review on other activities.)
- e) Take part in investigations of accidents (incidents' including near misses).
- f) Gathering and compiling of safety data.
- g) Interact with Project Manager, Resident Engineer, Supervisors and Workers.
- h) Interact with Client's HSE Department.
- i) Perform safety audits as per specific instructions.
- j) Identify the areas of environmental protection requirements.
- k) Discuss with Management on training requirements and implement education of the workforce.
- l) Improve HSE awareness amongst all CCCL personnel by using standard training aids such as videos, posters, films, handouts, etc.
- m) Monitor the activities involving potential environmental damage and advise the Project Manager on corrective actions.
- n) Take part in Client's :
 - HSE meetings
 - HSE audit
- o) Discuss with the Project Manager/ Project In-Charge on the effectiveness of the HSE monitoring programme.
- p) Monitor First aid facilities.
- q) Notify RSC on the HSE non-compliance and person responsible for that.

Project Coordinator

Project Coordinator is overall responsible and accountable for the HSE Management related to persons working at the project sites with him.

- a) PC with the help of Regional Safety Coordinator prepares project specific safety instructions taking into consideration the local applicable legal

requirements, in addition to the relevant portions of Safety Instructions of company.

- b) PC will ensure that a site specific HSE committee is formed by Project Manager within 30 days of job starting.
- c) PC will monitor the site safety performance

Project Manager / Project in Charge

The Project Manager / Project in charge will be fully responsible and accountable for all activities of the work site. His detailed responsibilities include the following:

- a) Implement CCCL and Client HSE Policy and HSE Plan.
- b) Ensure the provision and use of suitable safety equipment and protective clothing.
- c) Ensure that plant, vehicles and equipment are suitable, regularly maintained, correctly operated and not misused.
- d) Ensure that all accidents are reported and investigated.
- e) Initiate action to rectify the unsafe conditions and practices.
- f) Ascertain that all 'First Aid' facilities are kept available and maintained.
- g) Ensure that provision of a tidy and well-organised working environment.
- h) Ensure that the employees, under his control, are adequately trained for the work in hand.
- i) Issue clear, specific and regular instructions on HSE requirements, when directing operations.
- j) Consult the Head-HSE / Regional HSE Coordinator / Site HSE Personnel / P & M Manager on safety aspects related to particular activity / plant or machinery.
- k) Conduct site HSE meetings.
- l) Liaise and communicate with Client's HSE Department.

- m) Set and maintain a personal example at all times.
- n) Take part in :
 - The Investigation and reporting of incidents.
 - Site HSE Audits
 - Site Hygiene inspections
 - All HSE meetings.

P & M Engineer

The P & M Engineer shall be conversant with relevant rules and regulations of the CCCL HSE policy. His responsibilities/accountabilities will include:

- a) Responsibility that HSE Standards are being followed by Technicians and visitors at all times.
- b) Ensure that employees are given adequate information, instructions, supervision and training to enable them to carryout the duties and activities safely as required by CCCL / Client HSE Management System.
- c) Ensure that suitable Personal Protective Equipment such as Protective Clothing, Safety Helmet, Safety Belt, etc. is provided and used.
- d) Ensure that vehicles, plant and equipment are adequately maintained in an efficient, safe condition and comply with the relevant laws of the country and licensing requirements.
- e) Ensure that the lifting equipment displays SWL and is thoroughly inspected (by a third party) every 12 months. Records of such inspections must be kept at site.
- f) Ensure that only trained, competent / experienced operators operate the vehicles, plants and machines.
- g) Ensure that fixed, portable electrical installation and equipment are regularly checked by competent electrical staff.
- h) Ensure that all accidents and dangerous occurrences are reported and the more serious ones thoroughly investigated.
- i) Ensure the safe storage, transport and use of flammable and compressed gas cylinders.
- j) Set a personal example at all times.

Project Engineers / Supervisors / Foremen

Since the Site Engineers / Supervisors / Foreman are responsible and accountable for providing a safe work environment to their workforce, the primary safety inspections are their responsibility. As they spend most of their time in respective construction sections it is their task to continuously monitor working conditions.

Their qualifications include awareness of accident potential, application of HSE measures to their areas, ability to make intelligent decisions regarding corrective actions, diplomacy in handling personnel and situations.

Their responsibilities include:

- a) To be aware of the hazards of their activities and the necessary controls to prevent incidents.
- b) To ensure that all personnel on site have undergone the mandatory HSE Induction training courses prior to mobilising to site.
- c) To ensure that all employees are provided with necessary Personal Protective Equipment.
- d) To implement and promote awareness of safe working practices on job sites.
- e) To ensure that only trained and competent persons shall operate vehicles, plants and equipment.
- f) To ensure that cranes and lifting equipment have valid test certificates.
- g) To ensure that all employees are given adequate information, instructions and supervision to enable them to work safely. As a part of this, they will conduct the daily Tool Box Talks.
- h) Take part in the investigation of incidents and the dissemination of learning points to their workforce.
- i) Take part in the HSE meetings.

Sub-Contractor / Supervisor

The Sub-contractor and his supervisors are responsible and accountable for the safety of workers engaged by them and also they are held responsible if any of their activity/ worker causes danger to other workers/ activity.

- a) Sub-contractor shall ensure that all their workers attend safety induction conducted by company's Safety Engineer/Supervisor before engaging them on the job at site.
- b) Sub-contractor and their supervisor are responsible to provide all personal safety and protective equipment required, to perform the job as suggested by site Safety Officer / Safety In charge.
- c) Sub-contractor or his supervisor should take part in site HSE committee and communicate the HSE committee proceedings to his workmen.
- d) Sub-contractor or his supervisor should spare the workmen representatives selected by company for attending Site HSE committee meetings, safety audit and enquiries whenever required.
- e) Sub-contractor shall provide clean drinking water, wash rooms and canteen facilities and maintain the facilities in hygiene condition.
- f) Sub-contractor shall provide equipment and lifting appliances, which conform to specified requirements under rules.
- g) Sub-contractor shall arrange safety talk for 30 min. at least once in every week before starting the work, with the help of company's Safety Engineer/Supervisor/Project Engineer
- h) Sub-contractor or his supervisor should ensure that all the observations/ nonconformities given by Safety Audit Team are complied with in stipulated time period.
- i) Sub-contractor should make provisions for first aid and medical facilities to his employees.

Workforce

General responsibilities and accountabilities for the workers will be as follows:

- a) Every worker should/wear use personal Protective equipment provided to them.
- b) Every worker should follow all safety rules/ precautions such that the work practices do not cause injury to themselves or co-workers.
- c) Every worker is individually duty bound to take active interest in safety measures and observe safety precautions. In the same way Supervisors are responsible and accountable for the safety of their personnel and all safety requirements in their area of activity.
- d) All injuries occurred at Site - Major or Minor MUST BE reported to First Aid Centre and to the immediate Supervisor.
- e) Any unsafe condition/hazards observed affecting men, material or equipments must be reported to immediate Supervisor and Safety officer/ site safety in charge.
- f) Actively participate in Tool Box Talks.

Management Representative

Head – HSE is appointed as “Management Representative” and is given full authority and organizational freedom for ensuring that the requirements of HSE systems described in this manual are implemented and maintained.

Management Representative shall have the following responsibilities.

- a) To ensure that Procedures needed for the HSE Management System of the company are established, implemented and maintained in accordance with the OHSAS 18001:2007 & ISO 14000: 2004.
- b) To report to 'Top-Management' on the performance of HSE Management System'.

Further he will:

- Convene Company HSE Management Committee meetings periodically.
- Present the summary of performance on HSE management at sites to Company HSE Committee

- Communicate the Health, Safety and Environmental policies to all employees.
- Plan and organize HSE Audits
- Ensure corrective actions on system non-conformities through follow-up audits
- Liaison with external parties on matters relating to HSE Management System of the Company

In all matters pertaining to HSE, the decision of Head - HSE shall be final. He will have the authority to stop any work, which in his opinion does not conform to HSE – Management System requirements.

4.4.2 Competence, Training & Awareness

- a) Competency requirement for operating personnel whose work can cause significant environmental impact / occupation health and safety risk are identified as per [CSP-4.4.2](#) Procedure for competency mapping, training and awareness.
- b) CCCL identifies training needs and provides necessary training.
 - i) SE/SS to conduct awareness programmes to Construction Engineers /Supervisors at project site on HSE procedures/ instructions/ check lists/ formats.
 - ii) SE/SS to conduct safety induction training to all contractor's supervisors and workmen.
 - iii) SE/SS/PE to conduct safety talks to contractors' supervisors and workers once in a week on safety issues for a duration of 30 minutes.
 - iv) The training shall be imparted taking into account the ability, literacy levels, the language comprehension and risk levels of the personnel to be trained.
- c) Awareness with respect to HSE policy and procedures.
- d) Awareness of safety precautions related to their activities as detailed in "Operational Control Procedures".
- e) Emergency preparedness and response requirements specific to site.
- f) Benefits of HSE performance improvement

g) Consequences of departure from operating procedures.

Refer: [CSP-4.4.2](#) “Procedure for competency mapping, & training and awareness”.

4.4.3 Consultation, Participation & Communication

- CCCL communicates HSE-Policy to all employees through:
 - Training
 - Display of Posters at prominent locations at the offices & sites
 - Bulletins

New recruits are provided orientation with respect to HSE-Policy during their induction training.

- CCCL communicates with respect to Environmental, Occupational Health & Safety information to
 - Employees at various levels and functions through internal correspondence, meetings, circulars etc. and
 - Interested Parties through pre-contract reviews, feedback sessions, notifications etc
- Company HSE Committee and Site HSE-Committees are constituted in order to involve employees in the HSE Programs implementation through consultation and participation mechanisms.
- CCCL consults employees through these committees and ensures their involvement in the areas of
 - Development and review of policies & procedures to manage risk;
 - Changes that affect work place health and safety.

CCCL informs employees and interested parties with respect to matters relating to Environmental, Health & Safety Concerns through Head - HSE management.

Refer : [CSP-4.4.3](#) “Procedure for Consultation, Participation and Communication”

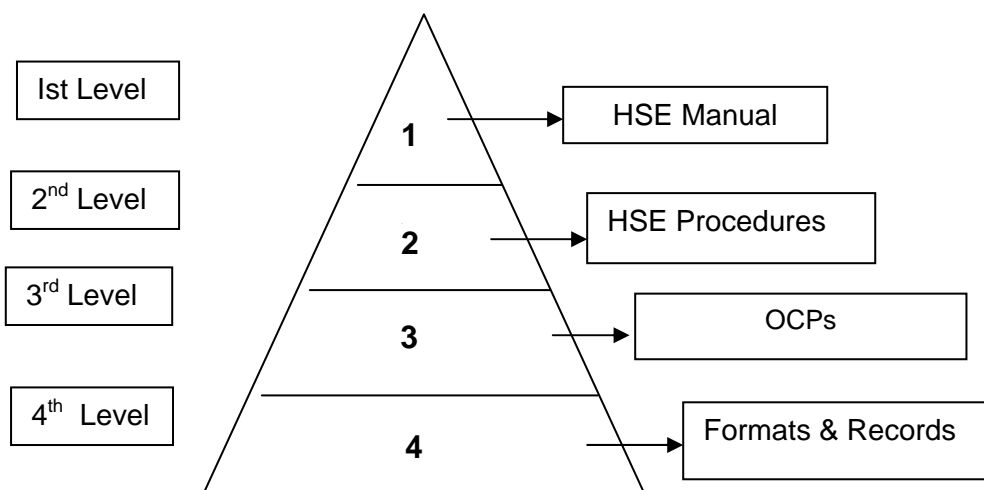
4.4.4 HSE Documentation

The Health, Safety & Environmental Management System documentation in CCCL includes the following:

- "HSE Policy" and "HSE Objectives".
- HSE Manual - First level
- HSE Procedures (CSPs) - Second level
- Operational Control Procedures (OCPs) – Third level
- Formats and Records – Fourth Level

The fourth level documents will consist of records and other formats used for maintaining the Health, Safety & Environmental Management System.

DOCUMENTATION PYRAMID



The HSE Procedures supporting the HSE management system are listed in the adequacy matrix.

Refer : [HSEM 0.5](#) –“Adequacy Matrix”

4.4.5 Control of Documents

The procedure for ensuring availability of pertinent issues of appropriate documents to the users shall be as per:

Refer : [CSP-4.4.5](#) “Procedure for Control of Documents”

4.4.6 Operational Control

CCCL identifies and carries out operations under specified conditions, which are

- Associated with significant environmental aspects &
- Associated with significant risks/major risks.

Specific operating instructions in the form of “Operating Control Procedures” are developed for these activities, where their absence could lead to deviations from HSE management system requirements, HSE-Policy and objectives & targets.

Refer : [CSP-4.4.6](#) ” Preparation and issue of Operational control procedures”

4.4.7 Emergency Preparedness & Response

CCCL identifies situations having potential for incidents/accidents and prepares emergency preparedness plan & response for preventing / mitigating.

- a) Likely illness / injuries / property damage.
- b) Environmental impacts associated with them.

CCCL reviews & revises (if necessary) it’s emergency preparedness & response procedures after the occurrence of incidents/accidents or emergency situations.

CCCL organizes mock drills/ test periodically (where practicable).

Refer : [CSP-4.4.7](#) “Procedure For Emergency Preparedness & Response”

4.5 CHECKING & CORRECTIVE ACTION

4.5.1 Performance measurement and monitoring

The operations having significant risks are controlled and monitored through “Operation Control Procedures” (OCPs).

CCCL monitors the operations through implementation of these OCPs while carrying out various site operations.

CCCL monitors accidents, ill health, and incidents (including near misses)

The measuring and monitoring equipment are calibrated and records maintained.

CCCL monitors the HSMPs for implementation and maintains progress reports.

CCCL evaluates and ensures compliance with relevant environmental health and safety legislations.

Refer [CSP- 4.5.1](#) procedure for “Performance Measurement & Monitoring”

4.5.2 Evaluation of Compliance

CCCL periodically evaluates its compliance with applicable legal and other requirements to which it subscribes and maintains records as per [CSP 4.5.2](#) - “Procedure for Evaluation of Compliance”

4.5.3 Incident Investigations, Nonconformities, corrective actions and preventive actions

CCCL established a procedure for Handling Investigation of incidents and Nonconformities.

CCCL takes needed corrective / preventive action as per the procedure to eliminate causes of actual and potential nonconformities and are appropriate to the magnitude and commensurate with Environmental Impacts /OH&S risks encountered.

CCCL implements and records changes to procedures resulting from Corrective/Preventive action.

Refer [CSP – 4.5.3](#) Procedure for Handling Incident Investigations, Nonconformity, Corrective Action & Preventive Action.

4.5.4 Control of Records

Records are established and maintained:

- a) To provide evidence of conformity to requirements;
- b) To demonstrate the effective operation of HSE management system.

A documented procedure has been established for Identification, Storage, Protection & retrieval indicating the retention period and disposition of records.

Refer [CSP - 4.5.4](#) “Procedure for Control of Records”

4.5.5 Internal Audit

CCCL establishes and maintains a procedure for conducting HSE-system internal audits. The internal audit schedules are issued twice a year by Head - HSE management.

Head - HSE management considers HSE performance while preparing audit schedules.

The schedules are based on the Environmental importance and results of risk assessments carried out.

Refer : [CSP- 4.5.5](#) “Procedure for Internal Audits.”

4.6 MANAGEMENT REVIEW

Management review is conducted by the Company's HSE Management Committee. The HSE Management Committee is the apex level committee to oversee the overall effectiveness of company's HSE policies, procedures. The committee meet at least twice in a year preferably after completing internal audits for reviewing the HSE management system performance.

4.6.1 Company HSE Management Committee

Constitution and responsibilities of various HSE committee members is detailed in clause no. 4.4.1. Head - HSE management organises to maintain record of minutes of HSE Management Committee meetings.

The structure of the HSE management committee is as follows

Chairman: MD
Facilitator: Head - HSE management
Members: RM, RSH, SH, HOD
Periodicity: Twice in a year

HSE - Management Committee will review HSE-performance as per the 'Agenda' for ensuring that HSE management system continues to be suitable, adequate and effective is continually improving.

The HSE - Management Committee 'Agenda' shall include the feedback from project sites HSE committees on the following points.

- a) Status of Legal and regulatory compliance
- b) Review of incidents and accidents
- c) Review of external interested party complaints
- d) Review of the results of Mock drills
- e) Results of Internal Audits and System Audits
- f) Status of corrective & preventive actions
- g) Review HSE Objectives & Targets and HSE performance of the organisation
- h) Review of HSE Policy
- i) Changes in legal and other requirements relating to environmental aspects and occupational healthy and safety
- j) Resources adequacy
- k) Follow up action of previous Management Reviews
- l) Recommendation for improvement

The committee will deliberate and take appropriate decisions for time bound implementation. Head - HSE management to record the decisions taken in the HSE committee meeting and communicate to all concerned. Head - HSE management to review the implementation of the decisions and report to top management on the status.

4.6.2 Site HSE Committees

The site HSE committee consists of the following members:

Project Manager (PM)/ Project in charge – Chairman cum Convenor
Safety Engineer/ Safety Supervisor– Secretary
Project Engineers (Civil / Mech. / Elec. etc),
Sub-contractor’s representatives & Workers representatives

Note: No. of worker representatives should not be less than management representatives.

The site HSE committee meetings are conducted once in a quarter with the following agenda points and the feedback is sent to HO / Head - HSE for review and to include after compiling in the company’s HSE - management committee meetings.

- a) Safety audit results.
- b) Accident investigation reports, if any.
- c) Compliance to safety audit observations.
- d) Compliance to system audit observations.
- e) Awareness, training and adequacy of displays and posters.
- f) Provision, use and quality of Personal Protective Equipment (PPE).
- g) Observations/inputs from workers representative.
- h) Adequacy of emergency preparedness and ensuring Emergency Response is current with the needs. Review of the results of Mock-drill.
- i) Review of previous minutes of meeting
- j) Review of forthcoming activities at the site and precautions to be taken against potential hazards.
- k) Review of Environmental Management Programmes (EMPs) and Health & Safety Management Programmes (HSMPs).
- l) Others, if any.

Note: Special site HSE Committee Meeting may be held any time as required.