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QUALITY

COMPLIANCE POLICY

CDB Consulting Engineers Limted (CDB) operates a Compliance Management System which combines the Quality, Health, Safety and Environmental disciplines into an integrated management system.

The Compliance **Quality Policy** is contained within Document No. CDB-100.001 Health & Safety Policy.

This is an integrated Policy covering Quality, Health, Safety and Environmental requirements.

This document has been specifically designed to work towards complying with ISO 9001, ISO 14001 and OHSAS 18001.

1. RESPONSIBILITIES

1.1 Corporate Management

The roles and responsibilities of the Corporate Management are defined in CDB-100.001 Compliance Manual

1.2 Head of Compliance

The Head of Compliance is responsible to the Operations Partner for overall policies and objectives regarding quality, health, safety and environmental matters and is responsible for the establishment and continuing improvement of the Compliance Management Systems. Specifically, the Head of Compliance is the management representative with regard to quality and is authorised to ensure that a quality system working towards being in accordance with ISO 9001 and ensuring that this is established, implemented and maintained throughout the company's activities.

In this capacity, the Head of Compliance shall also ensure that company's senior management receives regular information on the performance of the quality management system.

1.3 Associate.

Responsible for the implementation, maintenance and control of the Compliance Management System within the business areas/units to which they are assigned.

1.4 Engineering Manager

Responsible for ensuring that all designs, meet the requirements, including company philosophies and enhanced profitability through continual improvement. Has a particular responsibility for ensuring that design reviews and independent verifications are performed as required by the contract.

1.5 Project Managers

Responsible for managing the projects with first line responsibility to the Managing Partner (MP) for leading the project to successful completion on time, within budget and in compliance with the contract and specification requirements. The Project Manager acts as the Contractor's Representative on all client related project matters.

1.6 Project Compliance Co-ordinators

Responsible to the Head of Compliance for the co-ordination of all Compliance activities for the projects to which they are assigned and the overall implementation of the project Compliance plan. For major projects, a Project Compliance Co-ordinator is normally assigned and dedicated for the duration of the project with a reporting role to the Project Manager.

1.7 **Supervisory Personnel**

Responsible for ensuring that their staff are aware of, familiar with, and apply the procedures relevant to their area of work and that the work is carried out to the requirements, 100% complete, first time every task.

1.8 **The Individual**

The Company undertakes to ensure that all employees are clearly briefed on their duties and responsibilities, and that employees have the wherewithal to undertake their duties. The individual is responsible for the quality of his/her own work, and an awareness of Company and Project Specific Procedures.

2. MANAGEMENT SYSTEM

2.1 Introduction

2.1.1 The Quality Management System comprises of the Compliance Policy, Policy Document and this Quality Policy Document and supporting procedures and method statements. The system forms an integral part of the existing Company Management System.

2.1.2 The Compliance Policy has been declared and endorsed by the Managing Director and a copy is enclosed at the beginning of CDB-100.001 “Compliance Policy Document”. The policy will be posted at appropriate locations around the company.

2.1.3 The Company is committed to the achievement of quality and continuous improvement in all of its operations as a basic business philosophy. This objective is met by the application of certain basic principles, and also through the company management system.

2.1.4 The achievement of quality is to be interpreted as “meeting the requirements” (note: this does not mean exceeding the requirements). The requirements may be stated in a number of forms, such as:

- Contract documents and specifications
- Company procedures
- Legislation and other statutory requirements

In cases where the requirements are not formally documented, they shall be interpreted as “best industry practice”.

2.1.5 The basic principles which apply to all of the company’s operations may be summarised as follows:

- Responsibility – the individual is responsible or the quality of his/her own work
- Ownership – the Company’s working practices and procedures are “owned” by the employees who are required to operate them. To this end, individuals shall be consulted in the development of working practices and procedures which relate to their activities.
- Continuous improvement – the company shall seek to improve its operations on a continuing basis. Management and employees shall work together to identify possible improvements.
- Planning – all operations, whether undertaken collectively by the company or by the individual, shall receive adequate planning to ensure that they are executed “right first time”.

2.1.6 All employees are responsible for applying these principles within their work activities. Members of the Compliance Department are responsible for assisting others in the achievement of these objectives.

2.2 **Quality System**

2.2.1 General

The formal embodiment of CDB's quality management philosophy is the Quality System, comprising:

- A management structure which clearly defines responsibilities and authorities for the tasks required to meet company objectives
- A set of procedures, defining how the management structure achieves these tasks
- Information systems required to support the execution of these tasks
- Management programmes

The CDB Compliance organisation is depicted in Appendix A.

The Quality Management Systems for all operations are designed to be working towards complying with ISO 9001 and as a professional company we are working towards certification to this standard.

2.2.2 Management System Documentation

There are 4 levels of system documents and the hierarchy and basic numbering systems are depicted in CDB-100.001 – Compliance Policy Document,

The overall procedural system is headed by the Compliance Policy Document (CDB-100) which is considered as the Level 1 document. Procedures and method statements are in the "CDB" prefix series and are the Level 2 and 3 documents. Level 4 is comprised of working practices. The Compliance Policy Document and its supporting procedures, method statements and working practices form the Company Management System which applies to all of CDB's activities unless specifically agreed and documented.

The responsibility for production and implementation of corporate procedures lies with the nominated system "owner".

2.2.3 Project Procedures

The Company procedures are intended to be used without alteration for all projects undertaken by CDB. The Project Manager is responsible for proposing the use of CDB's company procedures to the client.

It is, however, recognised that some procedures (e.g. Quality Plans, Procedure Schedules and Organisation Structures) must be project specific and some clients have their own quality systems to which they require their contractors to adhere. In these cases, project personnel shall develop project procedures.

It is a requirement that personnel responsible for drafting project procedures shall familiarise themselves with the relevant company procedures and method statements, and shall adhere as closely to these as possible (where applicable, the same wording shall be used). If the client's requirements necessitate the preparation of project procedures, these shall be approved by the Project Manager and Head of Compliance or delegated person.

The responsibility for production and implementation of project procedures is a combination of project and company personnel. This responsibility is defined in the project procedure schedule which is normally agreed and issued at contract award or shortly thereafter.

Where project specific procedures are produced, these will take precedence on the project for which they were prepared. Company procedures, however, will retain their authority in all areas not specifically addressed by such project procedures.

2.3 Administration of the System

2.3.1 Management Review

The Quality System and Manual and their implementation shall be reviewed periodically to ensure that company objectives are being achieved, that company procedures are being adhered to, and that all ISO 9000 requirements are being attempted to be met. These reviews are conducted at various levels and under different circumstances, for example through audits, at contract review meetings, at Project Compliance Review meetings, and in meetings between the Executive Management and the Head of Compliance.

As a minimum, a minuted management review meeting shall be held at approximately 12 monthly intervals to cover each business location.

2.3.2 Amendments to the Procedures

All departments shall review the procedures to re-affirm their adequacy and conformance to current CDB and client requirements.

Amendments to the procedures shall be effected as required. The modified portions of text shall be clearly identified, and the procedure shall be re-issued with a new revision number. Each issue cancels and replaces all previous issues and amendments.

2.3.3 Controlled Copies

The Compliance Department shall be responsible for managing the distribution of Company management system documents, and for ensuring the maintenance of a register of the copy holders.

Full sets of Company procedures are issued to, and held by nominated personnel at strategic locations around Company premises for reference purposes. Selected procedures may be issued as hard copy to Department Head/Supervisor and certain individuals with direct responsibility for their application.

2.4 Quality Planning

2.4.1 Quality planning is an essential part of any quality system and, where appropriate, quality activities are included within the overall project plans.

2.4.2 Quality plans will be produced in accordance with Company procedures and contract requirements as applicable. Such plans shall set out the specific quality practices, resources and activities relevant to a particular project.

2.4.3 Management Programmes

Management programmes will be developed on an annual basis or longer period, where appropriate, to address major issues with regard to the achievement of the corporate objectives and implementation of continual improvement of the management system. These programmes will identify the actions to be undertaken by whom and will provide a time scale for completion. Regular monitoring and expediting of these programmes shall take place. Normally, the programmes will be designed to be completed within a calendar year with status reporting being given to the annual Compliance Review Meeting.

2.4.4 Inspection and Test (Quality Control) Plans

Inspection and Test (Quality Control) plans

Inspection and Test (Quality Control) plans (ITPs) will be prepared to identify specific activities, procedures applicable and standards to be achieved along with requirements for hold, review and witnessing inspections by CDB, client and/or third party representatives. ITPs for major projects will normally be prepared for each relevant discipline.

3. **PROCEDURE OUTLINES**

3.1 Contract Review

3.1.1 At the commencement of each project, key personnel shall review the contract requirements against a documented procedure, t confirm their understanding and interpretation of the scope of work. This review shall take into account any previous work conducted as a part of the tendering process. Particular risks, penalties, guarantees, etc. shall be highlighted against the enquiry to order status. Missing information, together with any necessary clarifications between the contracting parties, shall be determined and documented for resolution.

3.2 Design Control

3.2.1 Design controls shall be implemented and operated in accordance with procedures and/or method statements. Procedures are available to cover design checking, control and auditing of design deliverables during their preparation and control phases.

3.3 Document and Data Control

3.3.1 The responsibility for the issue and control of contract documentation, whether Client or internally originated, is delegated to the relevant Department and shall be carried out in line with documented procedures.

Documents to be controlled include drawings, datasheets, specifications, calculations and other technical documents.

3.3.2 The system of documentation control shall ensure that the pertinent issues of appropriate documents are available at all locations where operations essential to the effective functioning of the Quality System are performed.

The issue, control revision status and change control of contract documentation shall be recorded for each project in a master register held by the delegated Document Controller.

All changes to documents shall be implemented in writing and processed in a manner which ensures prompt action at the specified locations. Unauthorised written notations on documents shall not be permitted.

Changes to documents shall be reviewed and approved by the same functions/organisations that performed the original review/approval, unless specifically designated otherwise. Where practicable, the nature of the change shall be identified in the document.

It is the responsibility of the recipient to either remove and destroy or clearly identify all obsolete document at all points of issue or use.

3.3.3 Technical Standards and Regulations

National, international, company, regulatory requirements and industry standards shall be maintained up-to-date with revisions and amendments, at appropriate Company or Project locations.

Records of issues and holders of such standards within the company shall be maintained and a controlled lending system operated such that the standards, etc are accessible to all personnel as required.

3.4 Purchasing

3.4.1 General

Purchasing shall be carried out against documented procedures. It shall be ensured that all purchased materials and services for incorporation into the works conform to specified requirements. The requirements are applicable to both the placement of subcontracts and procurement of materials and equipment under purchase order agreements.

Only approved suppliers may be used for materials and services to be incorporated into the works.

3.4.2 Supplier Evaluation

Suppliers selected by the Purchasing and Commercial Departments for procurement of all CDB supplied materials and services for incorporation into the contract works, shall be evaluated in accordance with company procedures and approved by the Compliance and, for major items, the Commercial Department prior to them being awarded an approved status.

The selection of suppliers and the type and extent of control exercised shall be dependent upon product type, criticality and, where appropriate, on records of suppliers' previously demonstrated capability and performance. Supplier records shall be held at appropriate company locations.

3.4.3 Purchasing Data

Purchasing data shall include all information relative to the requirements including specifications, quality, certification and documentation, requirements and inspection/release arrangements.

Purchase requisitions shall be prepared by the Engineering Department based on material take-offs. Quality requirements shall be confirmed by the Compliance Department. It shall be ensured that all pertinent drawings, specifications and complete information relative to the item(s) to be procured are listed and that the sources of supply have all the data required to supply goods of an acceptable quality.

Requisitions are subsequently used as an integral part of the purchase order process to incorporate all of the necessary information as identified above.

3.4.4 Verification of Purchased Products

Conformance to specified quality requirements shall be verified at source or upon receipt (see section 3.8.2).

3.5 Control of Customer Supplied Product

3.5.1 Receipt

All materials supplied by the client for use on a specific contract shall be inspected on receipt for damage, completeness and contract requirements. They shall be received, stored and handled in accordance with company procedures or instructions specified in the contract.

3.5.2 Storage

Care shall be taken at receiving inspection of all customer supplied products to ensure documentation received with the material is correct and that all deficiencies and defects are reported immediately to the client for verification and action. Materials not accepted shall be segregated into a quarantine area and/or suitably identified until such time as the deficiency has been rectified.

Periodic inspection shall be conducted during storage to confirm the condition and adequacy of storage. Reports shall be issued when adverse results are encountered. The client shall be advised of all cases where its customer supplied products are found unsuitable for use.

3.6 Product Identification and Traceability

3.6.1 Items manufactured or designated for a specific location shall be identifiable through all stages of manufacture, installation, repair or modification. Bulk or proprietary non-traceable items are identifiable by virtue of type or size as applicable.

Where traceability is required by contract, codes or regulations, items are identified and traceable to a specified point or origin.

Where applicable, the unique identification is recorded in all documents, such as process and inspection and test records.

3.6.2 Traceability shall be operable from time of purchase order or contract placement throughout manufacture, and final assembly and test, and as defined in documented procedures or the contract.

The Compliance Department shall be responsible for determining which items of material, components and equipment require traceability and, as required by contractual requirements, for operating traceability in accordance with a system which shall provide for:

- Traceability of materials, components and equipment within the works
- Establishing with certainty the number and location of all nominated materials, components and equipment items which, if found to be defective, must be replaced.

The traceability requirements to be applied to CDB procured materials, components and equipment shall be specified in the order by the Project Compliance Co-ordinator or his designated representative.

3.7 Control of Inspection and Testing

3.7.1 General

Inspectors of various disciplines report to the Compliance Co-ordinators. The inspectors' role is to monitor and verify compliance with written instructions and specification requirements necessary in order to attain the desired level of quality of the finished product(s) for the project or projects to which they are assigned.

3.7.2 Receiving Inspection and Testing

Inspection of incoming products shall be carried out. In determining the amount ad nature of receiving inspection, consideration shall be given to past experience of the supplier, product type and criticality; the control exercised at source and documented evidence of quality conformance provided.

Verification shall be in accordance with those methods listed in the quality control procedure, or where necessary, within the project quality plan.

3.7.3 In-Process Inspection and Testing

The extent of inspection and test shall be determined in accordance with contract specification requirements. This is to include, where necessary, quality control (inspection and test) plans, indicating hold points beyond which production cannot proceed until inspection points re cleared.

Detailed written instructions as required by the quality control (inspection and test) plans shall be supplied to all manufacturing areas detailing the procedure to be followed to verify conformance of items to applicable requirements.

The control of quality during production shall be maintained by the production supervision with the Compliance Department performing inspections generally on a patrol basis as required by the quality control (inspection and test) plan. All inspections shall be recorded on the appropriate test forms by the relevant personnel.

3.7.4 Final Inspection and Testing

Final inspection and test shall be carried out against all completed products to include, where necessary, recourse to goods received and stage inspection release.

Final inspection and test shall be carried out in accordance with the quality plan or documented procedures, to complete the evidence of conformance of the finished product to the specified requirements.

3.7.5 Inspection and Test Records

Records shall be generated and maintained to adequately support and substantiate inspections and tests performed. These records shall provide evidence of the quality of the item and testify directly that it is in compliance with contractual requirements.

3.8 **Inspection, Measuring and Test Equipment**

3.8.1 Calibration and test records shall be maintained for the range of measuring, inspection and test equipment considered essential to demonstrate conformance of material/functions to specification requirements.

3.8.2 Measuring equipment shall be calibrated against certified equipment, having a known valid relationship to nationally recognised standards. Where no such standards exist, the basis used for calibration shall be agreed. The limits of error against calibration equipment shall be clearly defined.

3.8.3 Measurement standards and measuring equipment shall be calibrated at periodic intervals established on the basis of stability, purpose and usage.

3.9 Inspection and Test Status

3.9.1 Quality control procedures shall include methods for the identification of materials, items and components from receipt through to final inspection and test.

Records shall be maintained in such a manner that the inspection status of a particular item and/or fabrication may be identified at any particular time.

3.9.2 The status of items shall be identified by segregation, marking, inspection release certificates and material registers as applicable.

Actual physical markings shall be used where practicable, such as paint marker, hard stamping, tagging or labelling as an aid to production when required by procedures. Inspection status shall be indicated by the inspector's signature on the inspection documents relative to the operation performed.

Acceptance of finished assemblies shall be indicated by the inspector signing for the final inspection operation after he has verified that all previous inspection and process stages have been accepted and signed off.

The authority for removal of any adverse inspection status indicators such as tags, labels, stamps, etc. is the Project Compliance Co-ordinator or Head of Compliance.

3.10 Control of Non-Conforming Products

3.10.1 Products which do not conform to the specified requirements shall be readily identified and segregated, where possible.

The methods for identification, documentation, evaluation, segregation (where practicable) and notification to contracting parties of non-conforming products are given in the Quality Control procedures/method statements.

3.10.2 The Project Compliance Co-ordinator shall be responsible for dispositioning non-conforming items and shall ascertain that the deviation or discrepancy is clearly described relative to the acceptance criteria.

Where acceptance "as is" or rectification work is possible, acceptance or the method of rectification shall be agreed by the Inspector and the Discipline Engineer and the recommendation forwarded to the Project Compliance Co-ordinator, who will if necessary consult with the Head of Compliance and in accordance with contractual requirements the Client, at which point the item may be reworked or repair in accordance with the agreed rectification method.

CDB shall maintain objective evidence to substantiate that repaired and reworked items have been re-inspected or re-tested according to applicable procedures.

3.11 Corrective and Preventive Action

3.11.1 Where non-conformances are identified, either in products and services or to procedural or system requirements they shall be addressed by the raising of the appropriate documentation in accordance with approved procedures. Such documentation includes inspection reports, Non Conformance Reports (NCRs), Overage Shortage and Damage Reports (OS&Ds), Corrective Action Requests (CARs), queries, concession requests etc.

3.11.2 Corrective measures to be taken shall be defined, agreed, implemented and followed up to an acceptable standard and verified.

Safety corrective and preventive actions shall be reviewed through the risk assessment process prior to implementation.

3.11.3 Non conforming items, documents, systems and activities shall be analysed to determine causes and the preventive action required. Results of the analyses carried out shall be reported and trends identified for addressing during the Management Review of the Quality System.

Documents to be analysed include NCRs, CARs, OS&Ds, queries, concession requests and defect reports. Where necessary procedures shall be amended to prevent recurrence.

3.12 Handling, Storage, Packaging, Preservation and Delivery

3.12.1 All precautions to be taken to protect material from abuse, misuse, damage, deterioration and unauthorised use shall be identified in documented procedures. A system shall be maintained for the preservation and handling of designated items, whether purchased or client free issue, during the production and construction process.

3.12.2 Handling of parts during assembly and installation shall be monitored by the responsible supervisor in the particular area. Storage areas shall be made available for the isolation and protection of accepted bulk material, semi-finished parts, finished assemblies and shipped-loose materials pending use or shipment.

Items requiring special storage conditions shall be identified by the engineers and catered for accordingly. Heated, controlled storage conditions shall be provided as necessary.

Items subject to deterioration or corrosion due to environmental conditions shall be protected at all times in accordance with the contract requirements.

3.12.3 Preservation activities shall be carried out in accordance with the manufacturer's/supplier's instructions provided and the client specifications and/or requirements in order to ensure adequate measures are taken. In the absence of any specific instructions, then the discipline engineer shall define the requirements until further information is available.

Records of preservation activities shall be maintained, including measurements etc. where required. Non-conforming items shall be brought to the attention of the Engineer and the Compliance Co-ordinator when required.

Adequate packaging of finished products to assure cleanliness, prevent of damage and preservation during shipment shall be undertaken prior to releasing items for delivery.

Transportation protection shall be carried out in accordance with contract requirements. Where no requirements are specified, CDB standard practices shall be used, to ensure safe arrival at destination.

3.13 Control of Quality Records

3.13.1 Documented procedures will be implemented to ensure that adequate records are produced and maintained to demonstrate the achievement of the required quality and the effective operation of the Quality System. Pertinent subcontractor quality records shall be an element of this data.

Responsibility for the establishment and maintenance of these records shall be with the Compliance Department.

The records may be in hard copy or electronic media.

These records shall be legible and identifiable to a particular project scope where appropriate. They shall be collated, compiled, indexed and filed in a manner suitable to being readily retrievable throughout and subsequent to the duration of the project. When required, records shall be presented to the client progressively for evaluation and review, subsequent to final acceptance.

Storage of the quality records shall be such as to minimise their possible loss, deterioration or damage. They shall be retained in accordance with the archiving procedure unless otherwise required by contract, and made available to the client upon request.

3.13.2 Quality records required by the client shall be compiled and presented in as-built/final completion dossiers.

3.14 Internal Quality Audits

3.14.1 The Compliance Department shall establish, document and implement a plan for audits which shall comprehensively and objectively evaluate the adequacy of the functions, systems and procedures.

3.14.2

The plan may be satisfied by a combination of company and project audit schedules which shall define:

- The systems and areas to be audited
- The timing and frequency of audits

3.14.3 Audits shall be carried out by appropriately experienced/trained personnel who are not directly responsible for the area being audited and, performed in accordance with documented audit schedules and procedures and/or check lists which identify essential characteristics.

3.14.4

The results of the audits shall be documented and brought to the attention of the personnel having responsibility in the area audited.

Management and/or department heads responsible for the area audited shall review, agree and correct deficiencies revealed in the documented audit results.

All actions taken to correct deficiencies shall be reviewed to verify compliance and close out of the action shall be documented.

An analysis of the results of audits is to be available for discussion at the Management Review.

3.15 Training

3.15.1 All functions that require acquired skills and could be adversely effected by the lack of such skills shall be identified, and actions taken to remedy the situation.

Personnel performing specific assigned tasks shall be qualified on the basis of appropriate education, training and/or experience as required.

3.15.2 Each Department Head, in conjunction with Human Resources (HR) shall identify the qualifications required and/or training needs of personnel within his control. Personnel records, incorporating training, shall be held and controlled by HR. Certification for personnel may be maintained by the Compliance Department and/or Department Head when appropriate (eg welder qualifications by the Welding Engineer).

3.16 Servicing

In the event that servicing is a contractual requirement, then procedures will be developed, in accordance with the terms of the contract.

3.17 Statistical Techniques

The projects undertaken by CDB are normally unique, one-off capital projects and are not normally suited to use of sampling and statistical techniques.

Levels of NDE are normally specified within the terms of the contract, indicating both the type of inspection and the degree (eg 100% radiography). However, records are maintained and inspection results and data analysed when appropriate.

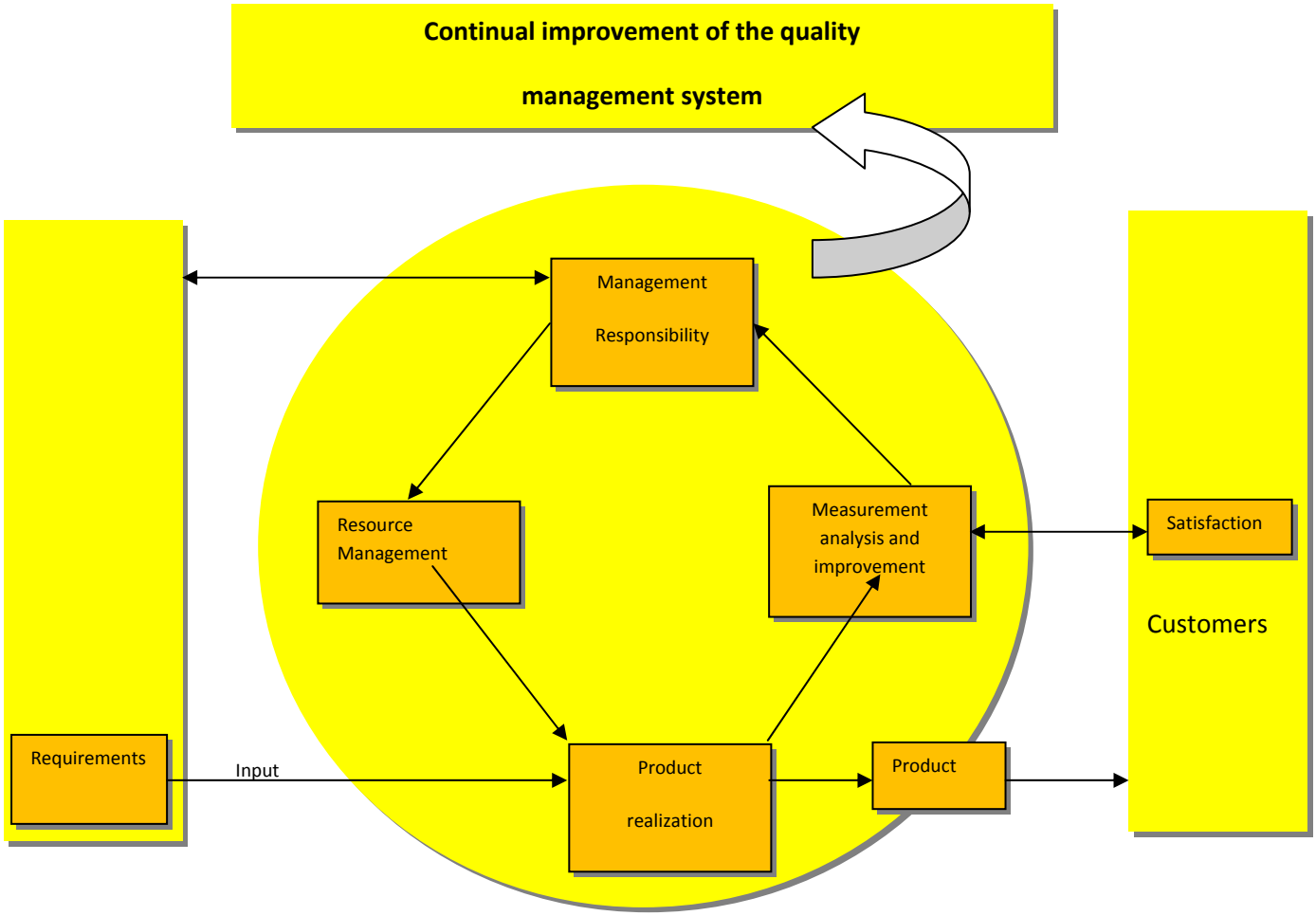
3.18 Customer Focus and Satisfaction

The CDB management philosophy and systems, defined in the Compliance Policy and CDB-100.001 Compliance, place great emphasis on the creation of a “satisfied client through the services provided”.

This focus is reflected throughout all operations to ensure that the client receives a product in accordance with the requirements, when he wants it and in accordance with the budget. Customer satisfaction is measured through procedure CDB-202.030 Client Satisfaction Monitoring.(To be approved)

3.19 Model of a Process-Based Quality Management System

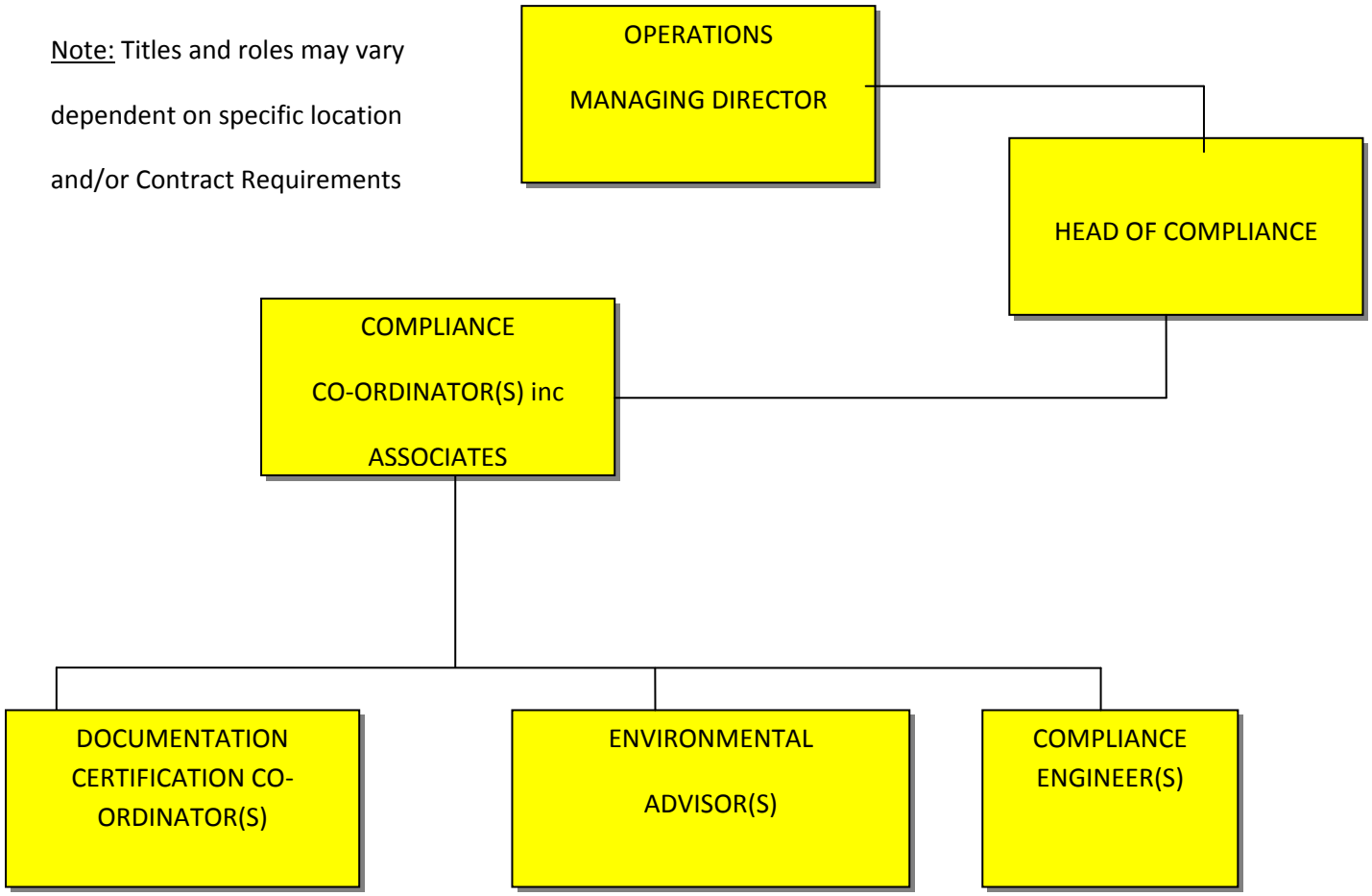
The following process model describes the improvement process in ISO 9001.



4. APPENDICES

Appendix A – CDB Compliance QUALITY Organisation

Note: Titles and roles may vary dependent on specific location and/or Contract Requirements



Audits

Site Inspections & Monitoring

Monitoring Legislation

Audits

Company Procedures

Supplier Assessment

Technical Library