

WELCOME

From

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This programme is about
ISO 9001 QMS & 14001 EMS

- **Its background in CIL**
- **Its standardization by ISO**
- **Its intended benefits**
- **Its concept and principles**
- **Overview of WCL's system**

ISO 9001 Quality Management System (QMS)

and

ISO 14001 Environment Management System (EMS)

[Brought out by ISO]

- ❖ **Are Management Standards**
- ❖ **They provide Internationally Standardized techniques for managing organisations**

CMPDI created a dedicated Cell in Aug. 97

(a full-fledged division since June 01)

To facilitate ISO systems in CIL Companies

In May 98 – started work of ISO 9002 in CCL

In Dec. 00 – Work of 14001 also started

In Sept 04 started allied studies, techniques

In Oct.05 – started work of OHSAS 18001

Start of ISO 9001 / 14001 work in CIL

- **CCL : May 1998 / Mar. 2001**
- **ECL : Nov. 1999 / Feb. 2001**
- **SECL : Nov. 1999 / Oct. 2001**
- **WCL : Feb. 2000 / Nov. 2001**
- **NCL : April 2002 / 1997**
- **MCL : July 2002 / May 2003**
- **BCCL : April 2004 / Not yet started**

PRESENT STATUS OF INTEGRATED MANAGEMENT SYSTEM



Units	ISO 9001:2008 (Quality Standards)		ISO 14001:2004 (Environment Standards)	
	Certified	In Progress	Certified	In Progress
Mining Projects	16 Umrer OC, Padmapur OC Gondegaon OC, Sasti OC, Ukni OC, New Majri OC Neeljay OC, Neeljay South OC, Durgpur OC, Mugoli, Bhatadih OC, Tandsi 1&2 UG, Tandsi 3&4 UG, Gauri-I&II OC, Pauni OC and Pimpalgaon OC	4 Saoner Mine No.1 Saoner Mine No.2 Saoner Mine No.3 Adasa UG	16 Same as for 9001	4 Same as for 9001
Workshops	1 Tadali	-	1	-
Others	6 Hqrs. Departments { Safety, Quality Control, Executive Establishment and Welfare Depts. and MRS including RRRT - Tadali, Parasia & Pathakhera	1	-	-

ISO implementation in CIL has been under review even
at the highest level

- On 2nd Dec. 02 in CMD's Meeting
- On 7th Feb. 04 in Chairman's meeting with CMD's
- On 7th Sept. 05 Chairman CIL advised all companies to implement these systems in all their Units in a time-bound manner

**A Corporate thrust very appropriate for
a mining giant**

ISO 9000 and ISO 14000 refer to

- ★ Specific management philosophies
- ★ Series of International Standards

Standardization by ISO

★ ISO 9000 series (core management standards)

[Now total 28]

★ Upgraded in 1994 and then in 2000

★ ISO 14000 series (add-on standards)

[Now total 21]

★ Also upgraded in 2004

The purpose is to tell

How an organization should be managed to ensure that it remains

★ Relevant

★ Performer, and

★ Acceptable

on a continuing basis

➤ **Dynamic performer, and Relevant**

in (even frequently) changing and highly competitive business environment, ISO 14000 Environment Management System are standards

➤ **Acceptable to all** by simultaneously achieving its 'economic', social and environmental goals – all efforts aligned to actual socio-economic needs

➤ **Capable of managing diverse needs and expectations of all interested parties – simultaneously**

The Basic Premise

Concerned Party	Its Expectation
Owners/Management	Investment Performance
Employees/Union	Career/Work satisfaction
Customers	Value of offering
Suppliers	Continued Business Opportunity
Society	Responsible Stewardship
<p>All these expectations are</p> <ul style="list-style-type: none">❖ Extremely diverse❖ Changeable with time	

Emergence of ISO 9001

[as a new approach of managing Organisation]

is the result of ... 3 factors

1. Quality Control approach showed failure

2. Traditional Management Techniques started showing their limitations (Resources / Productivity Management)

3. Deming identified the causes of failure

1. Failure of Quality Control

Till 1940's the method to ensure desired quality of delivered products was a method known as Quality Control

[At the end of production line...

A team of people will carry out inspections ...

to weed out products that would not meet customer requirements]

1. Failure of Quality Control

2nd World War

(most severe & immediate test of product quality)

Saw that product failed miserably to deliver their intended use, despite

- ❖ No faults in specifications & designs
- ❖ Use of suitable inputs & committed workforce
- ❖ Technologically matching production facilities
- ❖ Strict inspection of quality before delivery

Later Deming explained inherent ideological flaw in the traditional concept of Quality Control

2. Failure of Traditional Management

By 1950s traditional management techniques also started showing their limitations

Resource Management

Managing persons, money, material etc

Productivity Management

Managing capability to produce

LIMITATIONS OF TRADITIONAL MANAGEMENT

FLAW OF MANAGEMENT TECHNIQUES	BLAME PUT ON MANAGERS
Needed solutions do not come automatically	They delay too long in taking needed actions
Results producing actions are at the risk of personal image	They work harder at being liked than at producing result
Discussions for strategies is not automatically triggered	They are unable to take strategic decisions
Persons are considered an input for managing resources and technology	They are insensitive to others, aloof, abrasive, intimidating, arrogant
Faulty networking of organisational processes remain possible	They produce conflict among persons by betraying mutual trust
Emphasis remains on the technological indicators rather than other performance indicators	They are concerned with the poor functioning of the organization
Managerial decisions are based on personal views and attitudes	They over-manage some areas at the expense of others

3. Causes of Failure

By late 1940's causes of failure of organisations, were identified as

➤ **Special causes**

➤ **Common Causes**

CAUSES OF FAILURE

Special Causes	Common Causes
Prevent <u>uniform</u> performance of product / service	Prevent product / service to be considered <u>suitable</u> and/or <u>required</u> despite uniform performance
<u>Can</u> be identified by workforce	<u>Can</u> be identified by monitoring managers
Can be eliminated by supervisors / managers through Changes in technology, workmen, working procedure etc.	Can only be eliminated by top management through Changes in design & operation of organizational system
Occurrence 6 %	Occurrence 94 %

With this, the focus of management techniques got shifted to

- **Managing system capabilities rather than**
- **Managing technical capabilities**

Organizational Management – New Concept

New concept of organizational management

Emerged in Japan

and West termed it

QUALITY MANAGEMENT

More appropriately

ACCEPTABILITY MANAGEMENT

Organizational Management

– New Concept

Thrust is now on

Performance of the whole organization

Not just on its production capability

Management of Quality (= Acceptability) **concerns**

All organizational processes

Not just

Production processes / technical processes

(contributing just 6% to Organizational failure)

Organizational Management – New Concept

So, Productivity gets redefined
from
Capability to Produce
to
Capability to Perform

ISO 9001 & 14001

Uses

Systems Approach

which means managing an organization

As a System of Processes

(inter-dependent, inter-departmental)

Rather than as a

Conglomerate of persons, facilities, departments, technology

6 lakh companies have used

ISO 9001 / 14001 worldwide

All have to pass through a

Dynamics of Organizational change

In order to make a difference

Dynamics of Organizational Change

Phase	Reactions	Strategy
Phase - 1	Surprise & Disbelief due to <ul style="list-style-type: none"> ○ Low morale ○ Apathy / Inertia ○ Bias / Prejudice 	Impart awareness of <ul style="list-style-type: none"> • Ideological changes • New techniques
Phase - 2	Rejection & Ignoring due to <ul style="list-style-type: none"> ○ Fear of unknown ○ Intellectual arrogance ○ Apprehension of disturbance 	<ul style="list-style-type: none"> ▪ Making known the new procedures ▪ Demonstrating the resulting ease / advantage
Phase - 3	Pain & Defiance due to <ul style="list-style-type: none"> ○ Fear of losing power ○ Pressure against rigidity ○ Presumed loss of importance 	<ul style="list-style-type: none"> ▪ Clarifying network of responsibility-authority ▪ Inducing involvement
Phase - 4	Acceptance & Subscription due to <ul style="list-style-type: none"> ○ Commitment to new ideology ○ increased confidence 	Inspiring involvement towards continual improvement

LET US NOW SEE

WHAT IS ISO 9001

As a Management Concept

ISO 9000 has identified 8 thrust areas

[These are known as 8 principles of Quality Management]

1. **Customer Focus** — to understand their current & future needs
2. **Leadership** — for establishing unity of purpose and direction
3. **Involvement of people** — in thinking process
4. **Process Approach** — for system design
5. **System Approach** — to manage the organization
6. **Continual Improvement** - as permanent objective
7. **Decision making** — based on factual approach
8. **Supplier relationship** — for mutual value adding

Quality Management Principle No. 1

Customer Focus

**Organizations should realize that
customers come first not they,**

and

**that they depend on their customers not their
customers on them**

Since customers constitute the next process

they do not know any

and

Organizational barrier

This principle is reflected in ISO 9001:2000 clauses 5.2,7.2.3 and 8.2.1

Quality Management Principle No.2

Leadership

Leaders should believe that management is successful only if it is respectful of all employees and so, the leaders have to create and maintain an internal environment for all to become fully involved in achieving organizational objectives

This principle is reflected in ISO 9001:2000 clauses 5.3, 5.4, 5.5, 6.1 and 6.2

Quality Management Principle No.3
Involvement of People

**People at all levels should be convinced that they
are the essence of Organization,
and
that the traditional hierarchy where
‘the top thinks and other act’
is giving way to
‘thinking and acting at all levels’**

This principle is reflected in ISO 9001:2000 clauses 5.3, 5.4, 5.5, 6.1 and 6.2

- Purchase is not a department

It is a Process

- Maintaining Infrastructure

is not an activity

It is a Process

- Customer Focus is not a requirement

It is a Process

Quality Management Principle No.4

Process Approach

**Managers should realize that desired result
is achieved more efficiently when the
organizational activities and related resources
are managed as processes**

**And so they need to monitor processes and
not the Persons or Departments**

This principle is reflected in ISO all clauses of 9001:2000

Quality Management Principle No.5

System Approach to Management

Top Management should realize that organisations are driven by cross – functional and inter – dependent systems, and so, identifying, understanding and managing such systems contributes to the Organisation’s efficiency and effectiveness.

This principle is reflected in ISO 9001:2000 clauses 4.1 &4.2

Quality Management Principle No.6

Continual Improvement

Organisations should learn that only continual expansion in their ability can ensure and shape their future, and so, continual improvement in their ability should be their permanent management objective

This principle is reflected in ISO 9001:2000 clauses 8.5

Quality Management Principle No.7

Factual approach to decision making

All should know that decision could be effective only if based on data / information, and so, relevant data and information should be identified, correctly generated and collected for suitable analysis

This principle is reflected in ISO 9001:2000 clauses 5.4.1, 5.6.2, 7.3 & 8.4

Quality Management Principle No.8

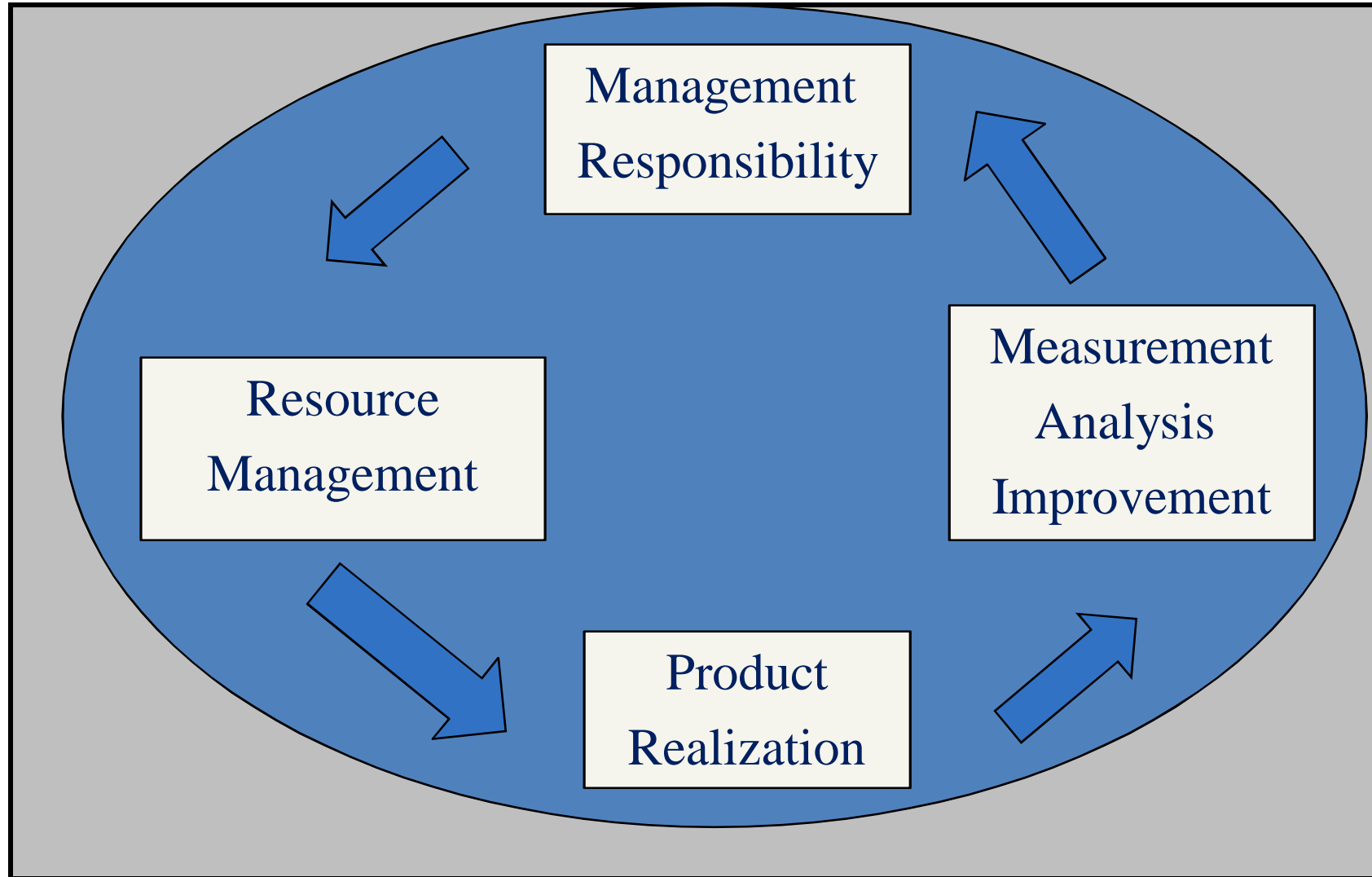
Mutually beneficial supplier relationships

All should know that decision could be effective only if based on data / information, and so, relevant data and information should be identified, correctly generated and collected for suitable analysis

This principle is reflected in ISO 9001:2000 clauses 4.1 &4.2

Requirements against all these 8 core areas

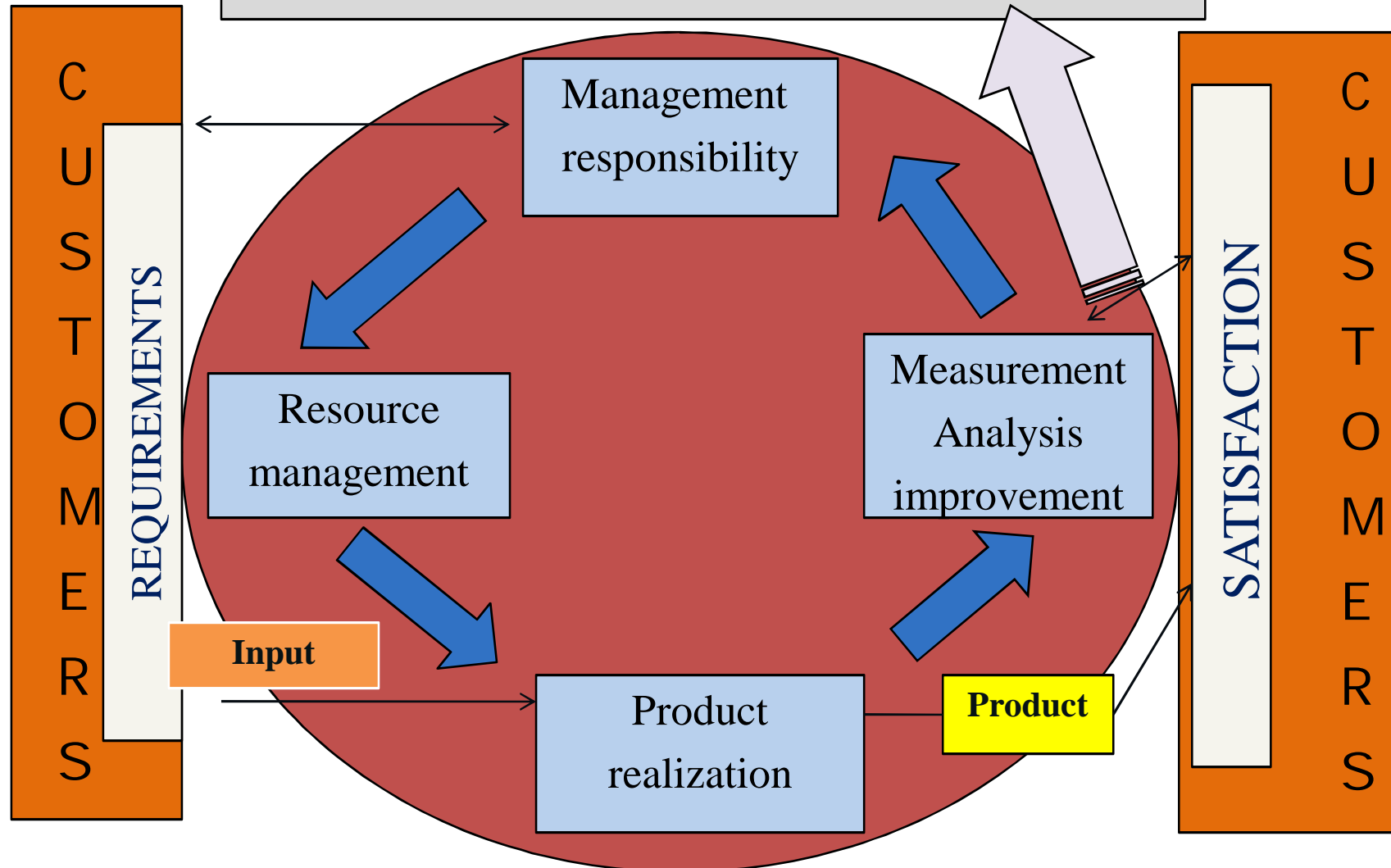
Grouped under 4 heads



This is

Process-based Model of a QMS

Continual Improvement



Some Myths about ISO 9001 / 14001

- Emphasis on Quality/Env. Leads to loss in Productivity
- ISO 9k / 14k involves excessive paper work and delays
- ISO 9k / 14k systems are like an army regiment
- Better Quality / Environment means extra cost
- Others will jog, I will slim down
- Quality/Env. depends on the work culture of the Employees
- Quality/Env. Concerns only manufacturing organisations
- Quality/Env. Can be pursued only after some base level
- ISO 9k/14k are some magical key to open-up the market
- Customer satisfaction / Env. Improvements are only on paper

Experience of ISO 9k/14k in various units in CIL has shown following benefits

- Installation of comprehensive management system for all activities
- Structured system for planning and result oriented monitoring
- Performance reporting against pertinent performance indicators
- Systematic & verifiable efforts/ actions for overall improvements
- Surfacing of long standing systemic imbalances and objective improvement actions against them
- Opportunity to increase acceptability of operations among all
- Improving internal efficiency and cutting down wastes
- Improvement in inter-personal relationship and image
- Change in mindset towards customer focus, environmental consciousness and more proactive attitude towards improvement

Failure of ISO 9001/14001 efforts are due to ...

- Tendency to take it as just another activity rather than a corporate level management policy
- Tendency to make it a power centre for trying to pursue unrelated purposes
- Running it as a parallel system by alienating it from main operations
- Traditional focus on Departments and procedures rather than on processes
- Tendency to become over-bureaucratic due to confusion over evidence vs records
- Over documentation under the system due to lack in understanding about documentation of processes
- Tendency to consider processes of Organisation **only as** processes of production

Let us now take an overview of

ISO 9001/14001 System of WCL

WCL's ISO 9001/14001 System

It is an **Integrated System**

- Complying to both ISO 9001 & ISO 14001

It uses **System Approach**

- If roles for an operation are at Area /Hq. they are also covered under the system

It covers **all operations of Projects**

- All core mining operations
- All support technical operations
- All support administrative operations
- All maintenance operations
- All planning and monitoring operations

WCL's ISO 9001/14001 System

- ❑ Its **roles, responsibilities, authorities** are among
 - CMD, DT's
 - CGM/GM's of the Area and some HQ. Departments
 - Some Functionaries of Areas
 - Sub Area Managers, Mine Managers
 - Sectional Heads
 - Other Supervisory / operational persons
- ❑ It is **documented under**
 - **Management Manual** – apex system manual
 - **Operational Manual** – defining instructions, criteria, monitoring methods for core operational activities
 - **Maintenance Manual** – defining arrangements for maintaining all infrastructure and work environment

Role of CMD

Clause	Role
4.2.1	Approval of system (as under 3 manuals), and their changes
5.1	Communicating importance of environmental concerns and importance of meeting requirements of customers and statutory – regulatory bodies
5.3	Establishing and declaring corporate policy (intentions & directions), and its periodic reviews
5.4	Ensuring that the following are established function-wise <ul style="list-style-type: none">▪ Objectives (quantifiable goals)▪ Targets (detailed performance requirements)▪ Programmes (detailed methodology for achievement) And their periodic reviews
5.5	Establishing specific responsibilities and authorities within the System
5.6	Deciding needed actions during quarterly apex reviews of System

Role Functional Directors

Clause	Role
5.1	Controlling resource provision (one time and periodic ones)
5.6	Deciding needed actions during quarterly apex reviews of system
7.1	Approval of functional objectives, targets and Annual Operational programs of projects
7.4	Approval for purchase proposals as per delegations
8.2.3	Review of monthly achievements against above programme

Role of Area CGM/GM'ss

Clause	Role
5.3	Ensuring communication of WCL's Management Policy to all interested parties
5.4.1 7.1	Proposing functional objectives / targets and Annual & Monthly operations programs for DT's approval and reporting performance against them
5.5.3	Communicating results of system performance (upward and downward)
7.4	Approval for purchase proposals as per delegations
8.2.3	Review of monthly achievements against functional objectives/ targets and Annual operational programmes
8.5.2	Deciding needed remedial actions on reported non-conformities

Role of Sub-Area Managers

Clause	Role
5.3	Ensuring communication of WCL's Management Policy to all interested parties
5.4.1 7.1	Proposing functional objectives / targets and Annual & Monthly operations programs for DT's approval and reporting performance against them
5.5.3	Communicating results of system performance (upward and downward)
7.4	Approval for purchase proposals as per delegations
8.2.3	Review of monthly achievements against functional objectives/ targets and Annual operational programmes
8.5.2	Deciding needed remedial actions on reported non-conformities