



# THDC India Limited

(Corporate Office, Rishikesh)

## Management Manual

(Based on ISO 9001: 2008, ISO 14001:2004 & OHSAS 18001:2007)

THDCIL -MM – 01, Issue - 01

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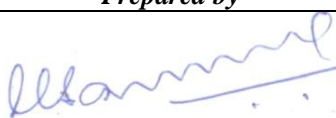
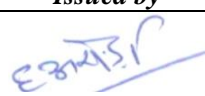
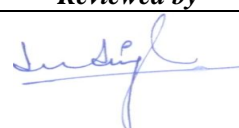

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Prepared by	Issued by	Reviewed by	Approved by
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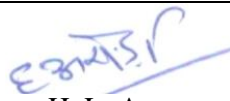




# THDC India Limited, Corporate Office Rishikesh

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	<b>Revision No.</b>	00
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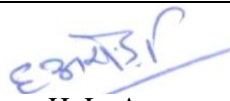
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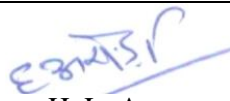
# THDC India Limited, Corporate Office Rishikesh

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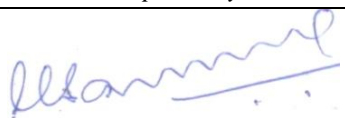
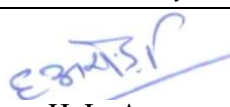
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# THDC India Limited, Corporate Office Rishikesh

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THDCIL	:	THDC India Limited (Name of Organization )
ISO	:	International Organization for Standardization
CMD	:	Chairman & Managing Director
HOD	:	Head of Department
FH	:	Functional Head
MR	:	Management Representative
MRM	:	Management Review Meeting
AGM	:	Additional General Manager
MR	:	Management Representative
SM	:	Senior Manager
Dy. MR	:	Deputy Management Representative
NCS	:	Non Conforming Services
NCR	:	Non Conformance Report
HOD	:	Head of the Department
FH	:	Functional Head
NC	:	Non-Compliance
MME	:	Monitoring and Measuring Equipments
NCS	:	Non Conforming Services
QMS	:	Quality Management System
MM	:	Management Manual
I/C	:	In-charge
HRD	:	Human Resource Development
IT	:	Information Technology
GOUP	:	Government of Uttar Pradesh
MOP	:	Ministry of Power
MOU	:	Memorandum of Understanding
Env.	:	Environmental
EMS	:	Environmental Management System
OH&S	:	Occupational health and safety
OH&SMS	:	Occupational health and safety management system

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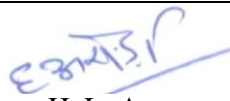


# THDC India Limited, Corporate Office Rishikesh

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Abbreviations used in common formats [Corporate Office level]:

CD	:	Control of Documents
CR	:	Control of Records
MRM	:	Management Review Meeting
CS	:	Customer Satisfaction
IA	:	Internal Audit
PA	:	Preventive Action
NCS	:	Non Conforming Services
LR	:	Legal and other requirements
IC	:	Internal Communication
EC	:	External Communication
EPR	:	Emergency, Preparedness and Response
EVL	:	Evaluation
ENV	:	Environment
EO	:	Environmental Objectives and Targets
OH&SO	:	OH&S Objectives
AR	:	Aspect Register
OH&R	:	Occupational Hazard and Risk Analysis

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# THDC India Limited, Corporate Office Rishikesh

## Management Manual

Section No.

1.4

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00

## Distribution List

Date

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The soft copy of this manual and the its related annexures are hosted on THDC internal portal, which can be accessed by all the employees of THDC India Limited.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>2.0</b>
	<b>Revision No.</b>	<b>00</b>
<b>Introduction</b>	<b>Date</b>	<b>04-03-2013</b>
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## FOREWORD

ISO 9001: 2008 has already been implemented at Corporate Office, Tehri HPP, PSP and VPHEP projects. Further, ISO 14001: 2004 has also been implemented at Tehri HPP, PSP and VPHEP projects. The process of ISO 9001: 2008 & ISO 14001: 2004 at Koteshwar project and ISO 14001: 2004 & OHSAS 18001: 2007 at Corporate Office has also been initiated. For integrated implementation of ISO 9001: 2008, ISO 14001: 2004 & OHSAS 18001: 2007 at Corporate Office, this management manual has been prepared.

The Management Manual describes the Quality / Environmental / Occupational Management System being followed by THDC India Limited to ensure that the products & services provided by the Corporation meet the customers' specified requirements, keeping all environmental aspects and occupational hazards under control. The Management System has been formulated on the basis of **ISO 9001: 2008, ISO 14001:2004 and OHSAS 18001:2007.**

This management manual provides a framework, which ensures that the Corporation addresses all the issues of importance, related to quality of products & services provided by it. In the entire documents of QMS, EMS and OH&S including this Management Manual, Procedure Manuals of different departments, Environmental / OH&S objectives and targets, Environmental Aspects, Occupational Hazards and Risks and Operational Control Procedures.

## SCOPE OF CERTIFICATION

Scope of certification is **“Providing Designs, Contracting, Quality Assurance, Consultancy & Support Services to Power Projects / Power Plants and other related activities”** as applicable to the area of operation of THDC INDIA LIMITED, Rishikesh, Uttarakhand, India.


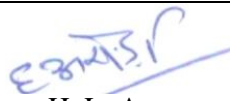
## STRUCTURE OF THE MANUAL

The Management Manual covers all the clause numbers of ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 under various sections. All pages of each Section / Sub-Section of this Management Manual carries the latest revision number. Revision No '00' has been given to first issue of the section. This manual is available only in English Language.

## ISSUE PROCEDURE

The Management Representative is authorized by Chairman & Managing Director (CMD) to carry out activities of preparing, issuing, maintaining and updating this Management Manual.

The Master Copy does not bear the stamp of **“CONTROLLED”**. Any additional copies of the Manual, required for external agencies, are issued by the Management Representative and such copies of the Manual issued are stamped **“UNCONTROLLED”** in red colour. These uncontrolled copies do not come under the preview of document amendment procedure and are not used within the company.

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## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	2.0
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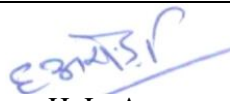
### REVISION, UPDATION AND AMENDMENT PROCEDURE

The Management Manual is reviewed periodically (once in three years or whenever any major change in the system takes place) by the Management Representative in consultation with the related Departmental Heads. No revision is implemented unless the competent authority has approved it.

The Management Representative introduces each revision formally by issuing revised page(s)/ document for each of the controlled copy as per the Distribution List. The revisions are indicated by the revision number in each of the revised Sections and recorded in the amendment sheet supplied with the controlled copies of the Manual. The initial edition is numbered as "00".

The insertion of the additional / amended sections and the removal of the old sections in the individual controlled copies as per the distribution list of the Manual is the responsibility of the person holding the individual copy. All old sections so removed are destroyed.

The Management Representative will retain one copy of the earlier versions of the Section(s) revised in archives for future reference.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>3.0</b>
	<b>Revision No.</b>	<b>00</b>
<b>Corporation's Profile</b>	<b>Date</b>	<b>04-03-2013</b>
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THDC INDIA LIMITED was set up as a Joint Venture Corporation of Government of India and Government of Uttar Pradesh in July 1988, and the Tehri Hydro Power Complex works were transferred to the Corporation in June 1989. The financial implication of Government of India (GOI) and Government of Uttar Pradesh (GOUP) in the implementation of the Tehri Hydro Power complex was agreed to as 75:25 for power component, while the irrigation component was to be funded entirely by the GOUP.

The 2400 MW Tehri Hydro Power Complex Comprises of Tehri Dam & HPP (1000 MW) Stage-I, Koteswar HEP (400 MW) and Tehri PSP (1000 MW). THDCIL has successfully commissioned the Tehri HPP during the Xth plan and Koteswar HEP during XI<sup>th</sup> Plan.

THDCIL has developed the capabilities to undertake Hydro Power Projects from concept to commissioning and operation. THDC is now a multi project organization with various projects at different stages of implementation. The Company presently has 15 Projects totaling to an installed capacity of 8770 MW under various stages of development. In addition, a number of Projects are in the business development stage.

In addition to the 1000 MW Tehri PSP (an integral part of 2400 MW Tehri Hydro Power Complex), THDC is implementing Vishnugad Pipalkoti Hydro Electric Project (444 MW) on river Alaknanda in Uttarakhand. The Project was accorded investment approval by the Government in August 2008. VPHEP is a World Bank funded Project. The loan agreement has been signed with the World Bank on 10<sup>th</sup> August'2011. THDCIL is also implementing 24 MW Dhukwan Project on Betwa River in Uttar Pradesh.


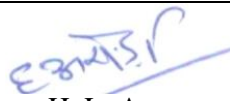
Besides this, 5 Hydro Projects totaling to installed capacity of 742 MW are under DPR / Investigation Stages in Bhagirathi, Alaknanda and Sarda Valleys in Uttarakhand.

Government of Maharashtra has entrusted two Pumped Storage Schemes (PSP) namely Malshej Ghat (700 MW) & Humbarli (400 MW) for Updation of DPR and subsequent implementation by the Joint Venture of THDCIL & NPCIL, if found viable.

Under India-Bhutan Co-operation in Hydro Sector Development, THDCIL has taken up two Projects namely Sankosh HEP (2560 MW) and Bunakha HEP (180 MW) in Bhutan for Updation of DPR. These Projects are proposed to be implemented on Intergovernmental Authority Model / JV with Bhutanese PSUs. A working Group comprising representatives from THDCIL and Druk Green Power Corporation (DGPC) has also been formed to process cases of land acquisition, environmental clearances etc., till a Joint Venture (JV) is formed.

Towards diversification of the Company into other energy areas, THDCIL has been entrusted with a coal based 1320 MW Khurja Super Thermal Power Station at Khurja in the state of Uttar Pradesh.

THDCIL also plans to diversify into conventional / non conventional and renewable sources of energy such as Wind and Solar, and to provide specialized consultancy services in the Power Sector.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>4.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>General Requirement</b>	<b>Date</b>	<b>04-03-2013</b>
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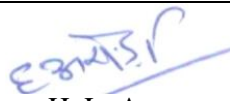
THDC India Limited has established, documented, implemented, maintained and has been continually improving QMS, EMS and OH&SMS in accordance with the requirements of these international standards for quality, environmental and OH&S management systems.

The Corporation:

- a) has determined the processes needed for the quality management system and their application throughout the Corporation (refer Annexure A of this management manual & individual procedure manual of concerned department for different processes);
- b) has determined the sequence and interaction of QMS processes at Corporation (refer Annexure A of this manual & procedure manual of concerned department for different processes);
- c) has identified the elements of PDCA cycle viz. Plan, Do, Check and Act in context of QMS, EMS & OHSAS and has also been following these while implementing and maintaining these management systems. (refer Annexure E-1).
- d) has identified the main elements of EMS (refer Annexure E).
- e) has identified their interaction of EMS elements (refer Annexure E)
- f) has identified the main elements of OH&SMS (refer Annexure F).
- g) has identified their interaction of OH&SMS elements (refer Annexure F)
- h) has determined criteria and methods to ensure that both the operation and control of these processes are effective (refer QMS/EMS/OH&SMS mandatory procedures, procedure manual of different departments, objectives targets & programs and operational control procedures).
- i) has ensured the availability of resources and information necessary to support the operation and monitoring of these processes. The resources required are also identified in the Management Review Meetings, other departmental meetings and through other Corporation procedures as required.
- j) is monitoring, measuring and analyzing these processes (refer Sub-Section 8.1, 8.2.1, 8.3, 8.5.1, 8.5.2, 8.5.3 & 8.4 of this Management Manual); and
- k) implements actions necessary to achieve planned results and continual improvement of these processes.

These processes are managed by the Corporation in accordance with the documented Management Manual in line with the requirements of ISO 9001, ISO 14001 and OHSAS 18001.

Corporation outsources a number of processes in conformity with requirements. Necessary controls and checks are exercised over such processes to ensure quality of services/product through relevant contract/work order/ agreement conditions. The details of such outsourced processes have been listed in respective Procedure Manual of different departments.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>4.2.1</b>
	<b>Revision No.</b>	<b>00</b>
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(Ref Clause ISO 9001 – 4.2.1, 4.2.2, ISO 14001 – 4.4.4 & OHSAS 18001 – 4.4.4)

## Management Manual

Corporation has developed this Management Manual to ensure compliance with each clause of the ISO 9001, ISO 14001 and OHSAS 18001 (international management systems) and documented quality, environment and OH&S policy, quality objectives and objectives & targets related to significant environmental aspects and occupational hazards. Management Manual makes reference to the relevant documentation used in the quality, environmental and OH&S management system for better understanding of how the system is designed to improve quality, environmental and OH&S performance.


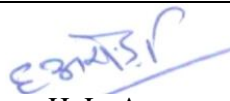
The management manual and other support documents like Procedure Manual, (Operational Control Procedures) OCPs, Work Instructions make references to standardized forms / formats for record keeping which represent the Level III documents and when completed, provide objective evidence of system implementation.

Management Manual and the documents referred therein ensure the effective planning, operation and control of various processes (identified in this manual).

Documentation also includes:

- The aspect register for various activities with respect to environmental aspects.
- The hazard register for various activities with respect to occupational hazard.
- Description of interaction between the processes of the QMS is given in the flowchart (Annexure A).
- Description of the main elements of environmental management system and their interaction and reference to related documents at Annexure E.
- Description of the main elements of OH&S management system and their interaction and reference to related documents at Annexure F.
- Documents, including records required by ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.
- Documents including records determined by Corporation to be necessary to ensure the effective planning, operation and control of its processes that relate to its key processes and significant environmental aspects.
- All the exclusions are identified by mark '#' in the Contents sheet at section no. 1.1 of the Management Manual. Justification for their exclusions is given in the relevant sections of this Management Manual.
- Management Manual gives reference to the documents established for the smooth implementation of Quality, Environmental and OH&S Management System.

Scope of the Certification as explained in this Management Manual is **“Providing Designs, Contracting, Quality Assurance, Consultancy & Support Services to Power Projects / Power Plants and other related activities”**.

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	4.2.3
	Revision No.	00
<b>Control of Documents</b>	Date	04-03-2013
	Page 1 of 5	

(Ref Clause ISO 9001 – 4.2.3, ISO 14001 – 4.4.5 & OHSAS 18001 – 4.4.5)

## 1.0 Purpose

This procedure describes the controlling process of all the documents used for different processes within the Quality, Environmental and OH&S Management System of Corporation.

## 2.0 Scope

Applicable to all the activities, products & services of the Corporation.

## 3.0 Definition & abbreviations:

MR	Management Representative
CD	Control of Documents


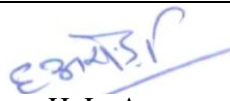
## 4.0 Responsibilities

MR along with nodal officers and concerned HOD's is overall responsible for implementation of this procedure.

### 4.2.3 Control of documents

#### 4.2.3.1 Description

Preparation of documents	Responsibility
Prepare draft document (Corporate level QMS, EMS and OH&SMS document).	MR
Prepare draft document (Documents related to QMS, EMS and OH&SMS within department).	Concerned HOD to ensure
Review the documents for adequacy and approval of the same.	Approving authority
Allocate number to the document & enter details in the <i>Documents Master List Cum Distribution Matrix</i> THDCIL-CO-F-MR-07 (Corporate level QMS, EMS and OH&SMS documents). The documents prepared initially are given Revision No. 00. Subsequently, the revisions are allocated revisions nos. in ascending order i.e. Rev. No. 01 02, 03 and so on.	Management Representative


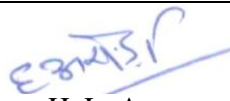
<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

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Activities	Responsibility
<b>Issue Control</b>	
Photocopies of approved documents are taken for distribution and controlled by putting 'CONTROLLED' stamp in blue Ink on each page. Master Copy of all documents will be marked as 'MASTER COPY' with blue ink on the backside of document. The Master Copy and controlling stamps are retained by MR/ Nodal Officer. Master copy of all formats and documents will be retained by MR (Corporation level QMS, EMS & OH&MS) and by Nodal Officer (Departmental level QMS, EMS & OH&MS). Master copy of formats will be identified by putting 'SPECIMEN' stamp on back side of each format.	MR at Corporate level & Nodal officer at department level to ensure
Issue documents (Corporation level QMS, EMS & OH&MS) to the concerned user department / person & update <i>Document Master list cum Distribution Matrix</i> THDCIL-CO-F-MR-07.	MR
Issue documents (departmental level QMS, EMS & OH&MS) to the concerned user department / person & update <i>Document Master list cum Distribution Matrix</i> THDCIL-CO-F-MR-11.	Nodal officer
The distribution of this management manual will be controlled as per distribution list. One copy of this manual will also be uploaded on THDC internal portal which can be accessed by all employees.	MR in consultation with HOD IT
This manual is available through THDCIL web-site / portal in read only (pdf) format to all employees and rights to modify/amend the manual vests with MR.	HOD IT to ensure
Ensure availability of relevant controlled documents at all locations where activities essential for effective functioning of the QMS, EMS & OH&SMS are being carried out.	Concerned HOD to ensure
Ensure that all the documents are legible.	Concerned FH
<b>Document changes / revisions -</b>	
After analyzing difficulties / deficiencies related to documents (including formats), review the necessary amendments with concerned functional head.	MR/Concerned HOD
Finalise and obtain approval on changes in document. MR / Nodal officer shall ensure that amendments to all documents are approved by the same authority as that of original version. In case this is not possible, same is designated otherwise. It is ensured that designated authority has access to the relevant background information upon which to base his review and approval.	MR at Corporate level & Nodal officer at department level to ensure
All superseded documents are withdrawn promptly from place of use and replaced with pertinent documents. Keep records of changes made in the documents in Documents Master list cum distribution list THDCIL-CO-F-MR-07 for Corporate level and in THDCIL-CO-F-MR-11 for departmental level.	Do
Stamp superseded Master document as 'OBSOLETE' with red ink and keep for future reference, legal or knowledge purposes. Dispose off all superseded 'CONTROLLED' Documents.	Do


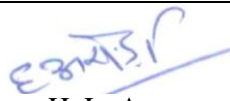
<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.2.3
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Activities	Responsibility
<b>Documents of External Origin -</b>	
After the retention period, the documents are disposed off by tearing, burning or by retaining further as per need. Documents maintained after its expiry of retention period are suitably identified for the purpose & assured against any unintended use.	MR/ Concerned HOD to ensure
Maintain a list of applicable National / International standards. Keep it updated by regular interaction with the concerned bodies. Records of updation are maintained in List of external origin documents THDCIL-CO-F-MR-06.	Concerned HOD to ensure
These external origin documents are controlled only by putting 'CONTROLLED' stamp on title page. They don't carry revision no., reviewing & approving authority & date. Their issue to the departments is controlled & recorded in THDCIL-CO-F-MR-06.	Do
<b>Document Numbering (QMS, EMS &amp; OH&amp;SMS documents at Corporate Level)</b>	
The documents prepared for the effective implementation of QMS, EMS and OH&S shall have a unique identification as per the following scheme:	MR
<b>Level – I, Document – Management Manual</b>	
<p>a) The Management Manual is designated as :</p> <p style="text-align: center;">THDCIL - MM - XX</p> <div style="display: flex; justify-content: center; align-items: center;"> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 100px; height: 100px; margin-right: 10px;"></div> <div style="margin-left: 10px;"> <p>→ Edition No. (01 onwards)</p> <p>→ Stands for Management Manual</p> <p>→ Short name for Corporation</p> </div> </div>	
<p>b) The Sections and Sub – Sections of the Management Manual are designated as:  Sub – Section No. : Y.Y  where YY is Clause No. of ISO 9001/(ISO 14001 for exclusive clauses of ISO 14001 &amp; OHSAS18001)</p>	
<b>Level II &amp; III, Documents</b>	
<p>1. Work Instructions / Checklists/ Formats are designated as  <u>THDCIL-CO- FWI/OCP/CL/EPR- AA -YY</u></p> <p>THDC – Short Name of Organisation.  CO – Short Name representation for Corporate Office, Rishikesh  F/ WI/OCP/EPP/CL–Format/Work Instruction/Operational Control Procedure / Check List/ Emergency Preparedness and Response Program  AA – Details of area as listed in section 1.3 page 2 of 2 of Management Manual)  YY – Running serial number</p>	

<i>Prepared by</i>	<i>Reviewed by</i>
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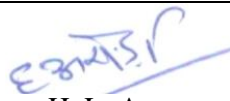


# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.2.3
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<b>Activities</b>	<b>Responsibility</b>
<b>Activity</b>	<b>Responsibility</b>
<b>Document Numbering at departmental level</b>	
Document numbering systems at departmental level, are described in relevant procedure manuals.	Concerned HOD to ensure
<b>Document Numbering (Common Activities for Corporation and departments)</b>	
All document numbers are indicated, preferably at right hand top corner of the document. For the First issue of Forms, the revision number '00' may not be indicated. The Revision No. will be indicated from 1 <sup>st</sup> revision onwards.	MR/ Concerned HOD to ensure
Paging of each documents is done as Page X of Y where X=1, 2,...N & Y is the total number of pages in that document.	MR/ Concerned HOD to ensure
Registers and Log Books have format No. on cover page only. All pages of these are serially numbered.	MR/ Concerned HOD to ensure
<b>Approving and issuing authorities</b>	
Approving and issuing authority for various documents will be as follows.	MR/ Concerned HOD to ensure

<b>Document Type</b>	<b>Approved By</b>	<b>Issuing Authority</b>	<b>Remarks</b>
Quality Policy	CMD	MR – Corporate office Rishikesh	
Environment Policy	CMD	GM (S&E)	
OH&S Policy	CMD	Additional General Manager (OMS, QA & Safety)	
Management Manual	CMD	MR – Corporate office	
Other Documents and Formats for implementation of QMS/EMS/OH&SMS	MR Corporate Office	Dy. MR – Corporate office	
Procedure Manual	Concerned HOD	Concerned Nodal officer	
Other Documents and Formats for effective working in department	HOD / Functional Head	Concerned Nodal Officer	

<i>Prepared by</i>	<i>Reviewed by</i>
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## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.2.3
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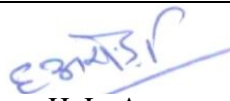
### Criteria to ensure effective control on Document control process

Effectiveness of operation and control on process (document control) will be reviewed through periodic internal audits by internal auditor. In addition to this MR will review and monitor that:

1. Only controlled documents are in use in the organization
  2. In case of any change in any document, the controlled copies are withdrawn and master copies are retained as obsolete copy for future reference.
  3. Obsolete copies removed from place of use
  4. List of external origin documents maintained with MR/ Concerned Functional Head.
- Records will be kept for any non-conformity observed during any such informal reviews.

#### 4.2.3.2 Records

Form No.	Title	Location	Retention Period	Disposal authority
THDCIL-CO-F-MR-06	List of external origin documents	Concerned Department	Forever	-
THDCIL-CO-F-MR-07	Documents Master List Cum Distribution Matrix (Corporate level QMS, EMS and OH&S Documents including formats)	MR Office	Forever	-
THDCIL-CO-F-MR-11	Documents Master List Cum Distribution Matrix (Department level Documents including formats)	Concerned Department	Forever	-

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	4.2.4
	Revision No.	00
<b>Control of Records</b>	Date	04-03-2013
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(Ref Clause ISO 9001 - 4.2.4, ISO 14001 – 4.5.4 & OHSAS 18001 – 4.5.4)

## 1.0 Purpose

This procedure describes the controlling process of all the records established to demonstrate conformity to requirements of its QMS, EMS & OH&SMS.

## 2.0 Scope

Applicable to all the activities, products & services of the company.

## 3.0 Definition & abbreviations:

MR Management Representative


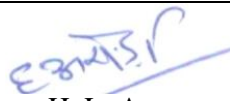
## 4.0 Responsibilities

MR along with nodal officers is overall responsible for implementation of this procedure.

## 5.0 Control of records - Procedure

### 5.1 Description

Activity	Responsibility
Identify the records to be maintained while establishing the system.	MR for Corporate level and Nodal officers for departmental level
Decide the retention period for all [Corporate Level] records in THDCIL-CO-F-MR-07, on the basis of customer requirement or effective maintenance of the system.	MR
Record retention time in records listed at the end of each section.	MR for Corporate level QMS, EMS & OH&SMS Records
Identify retention time for records developed by department and list out in Documents Master List Cum Distribution Matrix (departmental) THDCIL-CO-F-MR-11.	Nodal Officers in consultation with HOD
Ensure collection & proper indexing of identified records to facilitate easy retrieval, maintenance & storage to avoid damage or deterioration. Records should also be legible.	Concerned users
After the retention period, the records are disposed off by tearing or by retaining further as per need.	MR/ Concerned HOD ensure
Records maintained after its expiry of retention period are suitably identified for the purpose & assured against any unintended use.	Concerned users to ensure
Where agreed in the contract the records are made available for evaluation to the customer or his representative for an agreed period.	Concerned HOD to ensure

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	4.2.4
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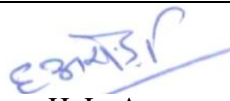
Activity	Responsibility
When the records are maintained in electronic media, ensure that access is restricted to authorized personnel, virus control & backup taken regularly to ensure preservation of data.	Concerned User in consultation with IT dept. to ensure
Ensuring proper confidentiality, integrity and availability of information stored on server databases. Also ensuring prevention of data from virus attack and malicious codes.	Concerned Functional Head in IT department

### Criteria to ensure effective control on Record control process

Effectiveness of operation and control on process (record keeping) will be reviewed through periodic internal audits by internal auditor. In addition to this concerned HOD/Nodal Officer will review and monitor that the records are legible, readily identifiable and retrievable and are stored properly. Records will be kept for any non-conformity observed during any such informal reviews.

#### 4.2.3.2 Records

Form No.	Title	Location	Retention Period	Disposal authority
THDCIL-CO-F-MR-06	List of external origin documents	Concerned Department	Forever	-
THDCIL-CO-F-MR-07	Documents Master List Cum Distribution Matrix (Corporate level QMS, EMS and OH&S including formats)	MR Office	Forever	-
THDCIL-CO-F-MR-11	Documents Master List Cum Distribution Matrix (Department level Documents including formats)	Concerned Department	Forever	-

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.3.1
	<b>Revision No.</b>	00
<b>Environmental Aspects/ Occupational Hazards</b>	<b>Date</b>	04-03-2013
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(Ref Clause ISO 9001 – N/a, ISO 14001 – 4.3.1 & OHSAS 18001 – 4.3.1)

## 1.0 Purpose

To establish and maintain a system for:

- Identification of environmental aspects of its activities, products and services & to determine those aspects that have or can have significant impact(s) on the environment (i.e significant environmental aspects) of environmental aspects & possible environmental impacts.
- Identification of hazard identification, related risks and the risk assessment.

## 2.0 Scope

Applicable to all the processes, products & services of the THDCIL and its contractor/ subcontractor that have significant impacts on the environment.

## 3.0 Definition & abbreviations:


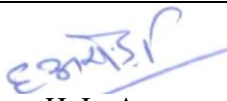
HOD	Head of the Department
MR	Management Representative
Environmental Aspect:	Element of an organization's activities, products or services that can interact with the environment.
Environmental Impact:	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.

## 4.0 Responsibilities

MR along with other HODs is overall responsible for the implementation of this procedure.

### 4.1 Description

Activity	Responsibility
<b>Identification of Environmental Aspects</b>	
All the environmental aspects pertaining to the processes, products and services of the Corporate Office, Rishikesh and users of its services are identified along with the legal & other requirement (refer THDCIL-CO-F-AR-01).	MR along with other representatives of concerned department.
Conduct environmental review analysis on identified processes, along with the concerned employees of the department.	Do
These aspects shall invariably take in to consideration the environmental policy of the organization as well as legal and other requirements.	Do
Consider environmental aspects like, (wherever relevant). a) Emission to air, b) Discharge to water, c) Contamination of land d) Waste management, e) Use of all natural resources and other resources, f) Legal requirements, g) Concerns of Interested Parties etc.	Do
The Environmental aspects are compiled along with the details of the impact happened or likely and evaluate the same.	Do
These aspects will include positive as well as negative impacts to the environment.	Do


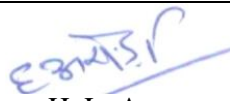
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<b>Management Manual</b>	<b>Section No.</b>	4.3.1
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<b>Environmental Aspects/ Occupational Hazards</b>	<b>Date</b>	04-03-2013
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<b>Activity</b>	<b>Responsibility</b>
Consider any potential emergency and accident situations with the assistance of the concerned personnel.	MR along with concerned HOD
The aspect register will be reviewed during departmental MRM and updated depending upon the progress made to attain the laid down objectives / services/products, new legal & other requirements or any other relevant factor.	Do
<b>Identification of Occupational Hazards</b>	
All the occupational hazards pertaining to the processes, products and services of the Corporate office and users of its services are identified along with the legal & other requirement (refer THDCIL-CO-F-OH-01).	MR along with other HOD's and FH
While identifying the occupational hazards, following points are taken into consideration: 1. All Routine and Non-routine activities performed at Corporate Office. 2. At most of the places, there is no actual workplace or production area at Corporate office, except the office space, however there are few departments, who have the activities which needs to be performed for delivery of their services like workshop, IT, Hospital, Services etc.. However all the offices and other work places are considered during identification of occupational hazards. 3. Human behavior, capabilities and other human factors. 4. Hazards which has probability of external origin but can adversely affect the health and safety of persons working at workplace. 5. Hazards created in the vicinity of the workplace by work-related activities under the control of THDCIL. 6. Infrastructure, equipment and materials at the workplace, either belongs to THDCIL or other organizations working on behalf of THDCIL. 7. Changes or proposed changes at Corporate Office. 8. Any modification to OH&S management system. 9. Applicable legal and other requirements. 10. The design of work areas, processes, installations, machinery/ equipment, operating procedures and work organization including adaptation to human capabilities.	MR along with other representatives of concerned departments
Conduct risk assessment on identified hazards.	Do
These hazards shall invariably take in to consideration the OH&S policy of the organization as well as legal and other requirements.	Reviewing members to ensure
While identification of hazards, following options should be considered: 1. Physical Hazards – e.g Inadequate light, inadequate space, manual handling, unsuitable thermal environment. 2. Chemical Hazards – Contact with, or being absorbed through the body, the storage, incompatibility or degradation of materials. 3. Biological Hazards – Biological agents, allergens or pathogens (such as bacteria or virus) that might be inhaled, transmitted, ingested (via contaminated food products). 4. Psychosocial Hazards – Situations that can lead to negative psychological conditions such as stress, anxiety, fatigue, depression etc..	Do


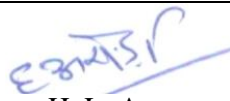
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<b>Activity</b>	<b>Responsibility</b>
The controls presently implemented and required to be implemented shall be identified during the risk assessment along with the departments dealing for implementation of such controls.	Review committee members to propose and MR along with other concerned HOD's to review and approve
While identifying the controls, following sequence if implementing hierarchy of controls should be considered. 1. Elimination – Modify a design to eliminate the hazard. 2. Substitution – Substitute a less hazardous material to reduce the system energy (e.g lower the force, amperage, pressure, temperature etc., if and as applicable) 3. Engineering Controls – Installation of ventilation system, ACs, lights, sound enclosures etc. 4. Notice Boards / Signages, warnings and/or administrative controls – Safety signs, hazardous area marking. 5. Personal Protective Equipments – Provision of personal protective equipments.	Review committee members
The controls identified for implementation, shall be prioritized for implementation (depending on the seriousness of hazard and related risk).	Concerned HOD to ensure
The Occupational hazard analysis and the priority of implementing controls will be reviewed during departmental MRM. The review during departmental MRM shall consider following issues – the need to determine whether existing risk controls are effective and adequate, the need to respond to new hazards, the need to respond to changes that the organization itself has made, the need to respond to feedback from monitoring activities, incident investigation, emergency situation or the results of testing of emergency procedures, changes in legislation, external factors like emerging occupational health issues, advances in control technologies, changing diversity in the workforce, including contractors, changes proposed by corrective and preventive action.	Nodal officers along with HOD's of concerned department
In case of any changes identified in existing risk assessment, the same needs to be communicated to MR, so that the risk assessment, corresponding controls and objectives & targets can be updated.	Concerned HOD to ensure after each review
<b>Evaluation of Significant Environmental Aspects</b>	
Environmental Aspects shall be evaluated on <b>Environmental &amp; Business</b> concerns related to the activity.	MR along with concerned HOD
<b>A. Environmental concerns:</b> F1 : Scale of impact F2 : Severity of impact F3 : Probability of Occurrence F4 : Duration of Impact	Do
<b>B. Business Concerns:</b> F5 : Difficulty and cost of changing the impact F6 : Effect on the public image of the organization	Do


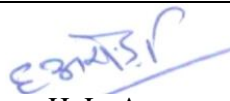
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<b>Activity</b>	<b>Responsibility</b>
Each of the factors F1 to F6 shall be assigned values between 1 to 10 based on the following consideration:	Do
<b>Scoring guidelines for Scale of Impact (F1)</b> a. Limited to immediate vicinity : 1-2 b. Limited to production /plant area : 3-6 c. Can extend beyond company premises : 7-10	Do
<b>Scoring guidelines for Severity of Impact (F2)</b> a. Low to negligible impact on environment : 1-2 b. Moderate impact on environment : 3-6 c. Very serious damage to the environment : 7-10	Do
<b>Scoring guidelines for probability of Occurrence (F3)</b> a. Low chance (Rarely) : 1-2 b. Moderate chance (Quite Often) : 3-6 c. Very high chance (Very Often) : 7-10	Do
<b>Scoring guidelines for Duration of Impact (F4)</b> a. Transient impact duration : 1-2 b. Not always quantifiable but impact exist and can be felt for more than a short period : 3-6 c. Persisting impact causing serious concerns : 7-10	Do
<b>Scoring guidelines for Difficulty and cost of changing the impacts (F5)</b> a. Simple and requires low cost : 1-2 b. Simple but high cost : 3-6 c. Difficult and requires high cost : 7-10	MR along with concerned HOD's
<b>Scoring guidelines for Effect on the public image of the organization (F6)</b> a. Low to negligible effect on the image : 1-2 b. Moderate to high effect on the image : 3-6 c. Very high leading to disturbance in working of the company : 7-10	Do
<b>Overriding Factors</b> Following are the overriding factors, which will make the aspect as significant, irrespective of its rating. <ul style="list-style-type: none"> <li>- Legal and other requirements</li> <li>- Interested Parties' Concern (All aspects that are expressed as a concern by more than 30% of employees working in the area or for which there are more than two communications received from external interested parties or which are being felt necessary by the evaluating members, are considered as interested parties concerns and become significant)</li> </ul>	Do

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR


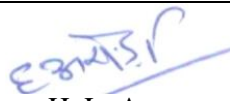




# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.3.1
	<b>Revision No.</b>	00
<b>Environmental Aspects/ Occupational Hazards</b>	<b>Date</b>	04-03-2013
	<b>Page 5 of 6</b>	

Activity	Responsibility
<b>Significant Rating</b> A. Significance rating based on environmental concerns ( $S_E$ ) $S_E = F1 * F2 * F3 * F4$ B. Significance rating based on business concerns ( $S_B$ ) $S_B = F5 * F6$ <b>Significant Aspects (<math>S_A</math>) = If (<math>S_E + S_B</math>) &gt; Average of significant rating values</b>	Do
Significant Aspects will be reviewed in the departmental Management Review Meeting at the time of reviewing the monitoring records.	Do
<b>Evaluation of Occupational Hazards and risk assessment</b>	
Risk Assessment shall be evaluated on <b>Occupational &amp; Business</b> concerns related to the activity.	MR along with concerned HOD
<b>A. Occupational concerns:</b> F1 : Scale of Exposure F2 : Severity of Consequences F3 : Probability of Occurrence	Do
<b>B. Business Concerns:</b> F4 : Difficulty and cost of changing the risk F5 : Effect on the public image of the organization	Do
Each of the factors F1 to F5 shall be assigned values between 1 to 10 based on the following consideration:	Do
<b>Scoring guidelines for Scale of Exposure to Hazard (F1)</b> a. Limited to single individual : 1-2 b. Limited to group of individuals : 3-6 c. Can impact employees beyond company premises: 7-10	Do
<b>Scoring guidelines for Consequence of Hazard (F2)</b> a. Low to negligible impact on Health : 1-2 b. Moderate impact on Health : 3-6 c. Very serious damage to the Health : 7-10	Do
<b>Scoring guidelines for probability of Occurrence (F3)</b> a. Low chance (Rarely) : 1-2 b. Moderate chance (Quite Often) : 3-6 c. Very high chance (Very Often) : 7-10	Do
<b>Scoring guidelines for Difficulty and cost of changing the Hazard (F4)</b> a. Simple and requires low cost : 1-2 b. Simple but high cost : 3-6 c. Difficult and requires high cost : 7-10	Do
<b>Scoring guidelines for Effect on the public image of the organization (F5)</b> a. Low to negligible effect on the image : 1-2 b. Moderate to high effect on the image : 3-6 c. Very high leading to disturbance in working of the company : 7-10	Do

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR




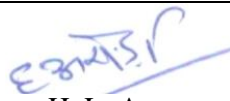
# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.3.1
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<b>Environmental Aspects/ Occupational Hazards</b>	<b>Date</b>	04-03-2013
	<b>Page 6 of 6</b>	

<b>Activity</b>	<b>Responsibility</b>
<p><b>Overriding Factors</b> Following are the overriding factors, which will make the aspect as significant, irrespective of its rating.</p> <ul style="list-style-type: none"> <li>- Legal and other requirements</li> <li>- Interested Parties' Concern (All aspects that are expressed as a concern by more than 30% of employees working in the area or for which there are more than two communications received from external interested parties or which are being felt necessary by the evaluating members, are considered as interested parties concerns and become significant)</li> </ul>	Do
<p><b>Significant Risk</b></p> <p>A. Significance rating based on occupational concerns (<math>S_o</math>) <math>S_o = F1 * F2 * F3</math></p> <p>B. Significance rating based on business concerns (<math>S_B</math>) <math>S_B = F4 * F5</math></p> <p>Significant Risk (<math>S_R</math>) = If (<math>S_o + S_B</math>) &gt; <b>Average of significant rating values</b></p>	Do
<b>Management of Change</b>	
<p>Adequate identification of hazards, related risks and risk assessment should be conducted in case of any changes such as:</p> <ol style="list-style-type: none"> <li>1. Introduction of technology</li> <li>2. Significant change in organization structure</li> <li>3. Change in machinery</li> <li>4. Change in location</li> <li>5. Change/ Addition in Management System</li> <li>6. Change of Processes/ Activity etc.</li> </ol>	Concerned HOD along with MR
After the risk assessment, the controls implemented and controls required to be implemented shall also be identified.	Concerned HOD along with MR
The controls identified for implementation, shall be prioritized for implementation (depending on the seriousness of hazard and related risk).	Concerned HOD to ensure

## Records

Form No.	Title	Location	Retention Period	Disposal authority
THDCIL-CO- F-AR-01	Aspect Register	MR Office	Forever	-
THDCIL-CO-F-OH-01	Occupational Hazard Analysis	MR Office	Forever	-

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.3.2
	<b>Revision No.</b>	00
<b>Legal and Other Requirements</b>	<b>Date</b>	04-03-2013
	<b>Page 1 of 2</b>	

(Ref Clause ISO 9001 –N/a, ISO 14001 – 4.3.2, OHSAS 18001 – 4.3.2)

## 1.0 Purpose

To establish a system for Identification/ updation of & access to legal / and other requirements related to Environment and OH&S and are applicable to various activity of the Corporate Office.

## 2.0 Scope

It covers all Acts, Rules & Regulations and other requirements related to the Environment & OH&S requirements applicable to Corporations operations, activities and services.


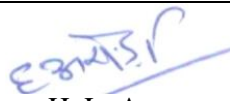
## 3.0 Responsibilities

HOD's in consultation with executives of concerned departments are responsible for the implementation of this procedure.

Other responsibilities are as defined against each activity.

### 3.1 Description

Activity	Responsibility
On receipt of information from various authorities/regulatory bodies/ Government agencies and other interested parties, obtain details of legal and other requirements.	Concerned HOD
For determining legal and other requirements, consideration shall be given (at least) to the requirements from various legal and other requirements, such as: a. State & Central pollution Control Board. b. Ministry of environment and Forest c. Ministry of Power d. Ministry of Health & Family welfare e. Local State Administration f. Local Municipal Authority. g. Visit site <a href="http://www.envfor.nic.in">www.envfor.nic.in</a> & <a href="http://ueppcb.uk.gov.in">http://ueppcb.uk.gov.in</a> h. Applicable Judgements of courts or administrative tribunals i. Applicable requirements from treaties, conventions, protocols j. Other concerned authorities/ agencies/ regulators k. CEA l. CWC m. Contractual Obligations n. Agreements with employees, interested parties, health authorities o. Voluntary principles, best practices or codes of practice, charters p. Corporate/ Company requirements	Concerned HOD to ensure
Review for change in existing requirements during departmental Management review meeting and inform MR for updation of new/existing requirements in list of THDCIL-CO-F-LR-01.	Concerned HOD

<i>Prepared by</i>	<i>Reviewed by</i>
 Manoj Sardana SM (QA – Civil & ISO) & Dy. MR	 H. L. Arora GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.3.2
	<b>Revision No.</b>	00
<b>Legal and Other Requirements</b>	<b>Date</b>	04-03-2013
	<b>Page 2 of 2</b>	


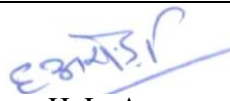
<b>Activity</b>	<b>Responsibility</b>
Obtain copies of known environmental/ OH&S legal & other requirements from the relevant sources.	Concerned FH
The existing and new legal/ regulatory and other requirements can be checked for any changes/ introduction. This can be achieved through the use of knowledge within the Corporation and/or through the use of external sources such as: <ul style="list-style-type: none"> <li>- Internet</li> <li>- Libraries</li> <li>- Trade Associations</li> <li>- Regulators</li> <li>- Legal services</li> <li>- Material/ Equipment Suppliers</li> <li>- Contractors etc.</li> </ul>	Concerned HOD
Copies of all relevant legislations shall be treated as Documents of External Origin and shall be subject to document control.	Concerned HOD
Identify the statutory returns applicable to the Corporation activities and services and update list of statute returns THDCIL-CO-F-LR-01.	MR in consultation with all HODs and functional heads
Identify the departments responsible for maintaining these returns under different acts, rules & regulations and other subscribed requirements related to the significant environmental aspects.	Do
Ensure that these returns are maintained as per frequency.	Do
Communicate the compliance requirements of applicable legal requirements and their amendment if any to relevant departments in the Corporation.	Concerned HOD

## Reference:

- Procedure for control of Document**
- List of external origin documents**
- Communication with external authorities and agencies**

## Records

<b>Form No.</b>	<b>Title</b>	<b>Location</b>	<b>Retention Period</b>	<b>Disposal authority</b>
THDCIL-CO-LR-F-01	List of Legal and Other requirements	Office of MR and concerned HOD	Forever	-
THDCIL-CO-LR-F-02	List of Statutory Returns	Office of MR and concerned HOD	Forever	-

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	4.4.7
	<b>Revision No.</b>	00
<b>Emergency Preparedness and Response</b>	<b>Date</b>	04-03-2013
	<b>Page 1 of 2</b>	

(Ref Clause ISO 9001 –N/a, ISO 14001 – 4.4.7, OHSAS 18001)

## 1.0 Purpose

To establish and maintain a procedure to identify potential emergency situations which can lead incidents that can cause impact on environment and affect on health of employees and how to respond to these emergency situation and for preventing and mitigating the environmental impacts/ occupational hazards associated with them.

## 2.0 Scope

This procedure is applicable to all identified potential emergencies.

## 3.0 Definition & abbreviations:


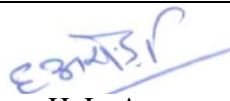
NIL

## 4.0 Responsibilities

Safety Officer in co-ordination with HODs of the different departments is responsible for the implementation of this procedure. Individual responsibilities are given under description:

### 4.1 Description

<b>Activity</b>	<b>Responsibility</b>
Identify the possibilities of abnormal operation/situations which lead to potential emergencies including natural disasters and list them in THDCIL-CO-F-EPR-01. Consideration to following points shall be given, while identifying the potential emergency situation: <ul style="list-style-type: none"> <li>- Incidents leading to serious environmental impacts/ injuries or ill health.</li> <li>- Natural disasters, bad weather</li> <li>- Loss of utility supply (e.g loss of electric power)</li> <li>- Civil disturbance, terrorism, workplace violence.</li> <li>- Failure of critical equipments. etc.</li> </ul>	HOD (OMS, QA & Safety) in consultation with concerned FH
Identify the competent personnel/department responsible for conducting the mock drills (wherever practicable) and record the same in list of potential emergencies THDCIL-CO-F-EPR-01.	Do
Prepare the emergency preparedness and response program for identified potential emergency situations.	Concerned FH as identified in THDCIL-CO-F-EPR-01
The emergency procedure(s) should be clear and concise to facilitate their use in emergency situations.	Do
They should also be available for all the personnel/contractors/consultants and other personnel working on behalf of organisation.	Do

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

## Management Manual

Section No.

4.4.7

Revision No.

00

Date

04-03-2013

## Emergency Preparedness and Response

Page 2 of 2

Activity	Responsibility
Emergency response procedure(s) should define the roles, responsibilities and authorities of those with emergency response duties, especially those with an assigned duty to provide immediate response.	Concerned FH as identified in THDCIL-CO-F-EPR-01
Ensure that personnel are aware of these programs.	Concerned HODs
Conduct mock drills (where practicable) as per defined frequency and keep records of the same.	As per THDCIL-CO-F-EPR-01
During Mock drills, verify whether the personnels responsible for mitigating the emergencies are following emergency preparedness and response programs. Record the results of Mock Drill in THDCIL-CO-F-EPR-02.	Concerned HOD responsible for Mock Drill
Emergency response plans are reviewed and revised, where necessary, in particular after the occurrence of situation or after periodical testing.	MR
In case of occurrence of an accident or emergency situation, review the emergency preparedness and response plan for its effectiveness, if necessary, revise the plan and inform concerned department and MR.	Concerned FH as identified in THDCIL-CO-F-EPR-01

### Records:

Form No.	Title	Location	Retention Period	Disposal authority
THDCIL-CO-F-EPR-01	List of Potential Emergency	MR Office	Forever	-
THDCIL-CO-F-EPR-02	Mock Drill Record	Concerned Department	3 Years	Concerned HOD

Prepared by

Reviewed by

Manoj Sardana  
SM (QA – Civil & ISO) & Dy. MR

H. L. Arora  
GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.1 &amp; 5.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>Management Commitment</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001 – 5.1 & 5.2, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 5.1 Management Commitment

Management of THDC INDIA LIMITED is totally committed to the development and implementation of Quality Management System and continual improvement of its effectiveness. Top management has taken keen interest and provided necessary resources needed for the development of Quality Management System. Top management's commitment towards QMS is shown through following actions:


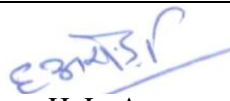
- Importance of meeting customers' requirements is communicated within the Corporation through regular interactions and training sessions.
- Communicating information / requirements of interested parties like CEA, MOP, CWC, Promoters, Beneficiaries etc.
- Everyone within the organization is convinced that only way to achieve Corporation's and personal growth is through complete satisfaction of customers by meeting their stated as well as implied needs.
- Various statutory and regulatory requirements, as laid down by CWC, CEA, MOP, MOEF, GOI etc. are complied with by THDC INDIA LIMITED. Specific statutory and regulatory requirements as applicable to different departments of Corporate Office, Rishikesh have been spelt out in procedure manuals of the respective departments.
- Quality Policy, Environmental Policy and OH&S Policy are established, communicated, understood and maintained at all levels and functions within the organization.
- Management reviews are conducted at least once in **three** months at departmental level and once in **six** months at Corporate level.
- Provision of resources for the effective implementation of QMS, EMS & OH&SMS.

## 5.2 Customer focus

For the purpose of implementation of quality management system, THDC INDIA LIMITED, Corporate office has identified its customers, which are broadly classified in two categories.

- Primary Customer – All power projects and plants of THDC INDIA LIMITED
- Secondary Customer – All beneficiary States
- Internal Customers – Different departments who enjoy services of various departments at Corporate Office, for eg. All personnel are internal customers of Finance, P&A.

Top management has also ensured that a mechanism has been established (refer Procedure Manual of various departments – for Power Projects and plants of THDC India Limited & internal customers; and Commercial department – for all beneficiary states) to determine and meet customer requirements with the aim of enhancing customer satisfaction. Mechanism of monitoring customer satisfaction level is given in Sub-section -8.2.1 of this Manual.

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	5.3
	Revision No.	04
<b>Quality, Environment and OH&amp;S Policy</b>	Date	24-10-2011
	Page 1 of 3	

(Ref Clause ISO 9001 - 5.3, ISO 14001 – N/a, OHSAS 18001 – N/a)

Top management has established a quality policy which:

- is appropriate to the purpose of the organization.
- includes a commitment to comply with requirements and continual improvement in effectiveness of QMS performance.
- provides a framework for establishing and reviewing quality objectives.
- is communicated and understood within the organization.
- is reviewed for continuing suitability (during MRM).

## Quality Policy

***Committed to continuously strive for becoming a major global player in power sector through quality, cost-effective planning, investigation, design and implementation of Power Projects adopting state of art technology for achieving excellence in engineering with responsive social, environmental and safety consciousness for enhancing customer satisfaction by way of training, team work and continual improvement in Quality Management System.***


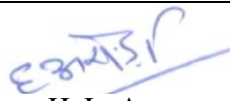
**-Sd-**

**(D.V Singh)  
Director (Technical)**

**-Sd-**

**(R.S.T Sai)  
Chairman & Managing Director**

QP / THDC / Rev / 04  
Dated 24.10.2011

Prepared by	Reviewed by
 Manoj Sardana SM (QA – Civil & ISO) & Dy. MR	 H. L. Arora GM (OMS, QA & Safety) & MR





# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	5.3
	Revision No.	00
<b>Quality, Environment and OH&amp;S Policy</b>	Date	01-02-2011
	Page 2 of 3	

(Ref Clause ISO 9001 – N/a, ISO 14001 – 4.2, OHSAS 18001 – N/a)

Top management has established an environmental policy for the organization which:

- is appropriate to the nature, scale and environmental impacts of its activities, products and services,
- includes a commitment to continual improvement and prevention of pollution,
- Includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects,
- provides a framework for setting and reviewing environmental objectives and targets,
- is communicated and understood to all persons working for or on behalf of the organization, and
- is available to public.

## Environment Policy

**We are committed to provide sustainable power with commitment for protection of Environment and to minimize pollution.**

**We aim to achieve continual improvement in Environmental performance by setting objectives, reviewing progress and communicating results.**

**For reduction of our environmental footprints, we shall:**


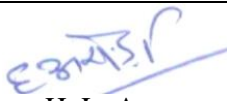
- **Comply with applicable legal requirements, laws, regulations and follow best practices.**
- **Communicate our Environment Policy to all our stakeholders, including our employees**
- **Facilitate our employees, contractors, sub-contractors, suppliers and consultants to fulfill their environmental obligations with respect to our business operations & activities.**
- **Strive to conserve resources, reduce waste and mitigate environmental risks that may be associated with our activities.**
- **Review and continually improve environmental management systems in line with ISO 14001 and integrate the same into our business processes.**

-Sd-

(Rakesh Khare)

General Manager (Social & Environment)

THDC / EP / Rev. 00  
Dated 01.02.2011

<i>Prepared by</i>	<i>Reviewed by</i>
 Manoj Sardana SM (QA – Civil & ISO) & Dy. MR	 H. L. Arora GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	5.3
	Revision No.	00
<b>Quality, Environment and OH&amp;S Policy</b>	Date	01-02-2011
	Page 3 of 3	

(Ref Clause ISO 9001 – N/a, ISO 14001 – N/a, OHSAS 18001 – 4.2)

Top management has established an OH&S policy for the organization which:

- is appropriate to the nature and scale of its OH&S risks,
- includes a commitment to continual improvement,
- Includes a commitment to at least comply with current applicable OH&S legislation and with other requirements to which the organization subscribes,
- provides a framework for setting and reviewing environmental objectives and targets,
- is communicated to all employees with the intent that employees are made aware of their individual OH&S obligation and
- is available to interested parties.
- is reviewed periodically (during MRM) to ensure that it remain relevant and appropriate to the organization.

## OH&S Policy

**We are committed to ensure health and safety of our employees as well as employees of contractors, sub-contractors and consultants.**

**We shall conduct our business in a safe and socially responsible manner. We shall comply with applicable legal requirements, laws, regulations and best practices. We shall strive to integrate health and safety considerations into all aspects of our business activities.**

**We shall**

**Support a culture that raises employees' health and safety awareness;**

**Adopt and implement Occupational Health and Safety Management Systems and strive for continual improvement;**

**Fulfill necessary requirements to provide healthy and safe working environment;**

**Enhance awareness and concern toward Occupational Health and Safety Management Systems amongst employees;**

**Train employees and relevant stakeholders on health and safety aspects;**

**Yearn to achieve excellence in Occupational Health and Safety.**


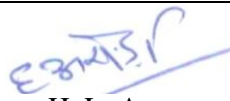
-Sd-

(H. L Arora)

**Additional General Manager (OMS, QA & Safety)**

THDC / OH&S / Rev. 00

Dated 01.02.2011

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.4.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>Quality, Environmental and OH&amp;S Objectives</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

## Objectives, Targets and Programme(s)

### (A) Quality objectives


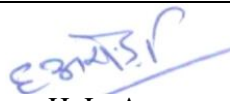
(Ref Clause ISO 9001 – 5.4.1)

Top management has established measurable Corporate Quality Objectives for Corporation (Refer Annexure 'B'). Concerned HODs have established functional quality objectives for their respective departments. (Refer Procedure Manual for functional level quality objectives). These quality objectives are relevant to the services being rendered by THDC INDIA LIMITED and are consistent with the Quality Policy.

These quality objectives are the targets, which the top management has set for the organization to achieve its laid down policies within a certain time frame. Achievement and suitability of these objectives are reviewed in management review meetings.

### (B) Objectives, Targets and Programme(s) (Ref Clause ISO 14001 – 4.3.3 & OHSAS 18001-4.3.3)

Activity	Responsibility
Review the environmental aspects register and set the objectives and targets (Refer THDCIL-CO-F-EO-01) with considerations to the followings. <ul style="list-style-type: none"> <li>➤ Legal and others requirements to which Corporate Office, Rishikesh subscribes.</li> <li>➤ Environmental significant Aspects (Refer Aspect Register)</li> <li>➤ Occupational Significant Risks (Refer Occupational Hazard Analysis)</li> <li>➤ Concerns of Interested Parties.</li> <li>➤ Technological options.</li> <li>➤ Evaluation of the effectiveness of the EMS and OH&amp;SMS through internal audits and Monitoring &amp; Measurement.</li> <li>➤ Financial, Operational and business requirements.</li> </ul>	MR along with Concerned HOD and Functional Heads
While setting targets and objectives, ensure that the same are achievable and consideration to techno-economics option should be given. (Technological options, financial constraints, operational & Business requirements.). Significant environmental aspects and Significant Occupational risks shall also be considered while setting the objectives.	MR along with Concerned HOD and Functional Heads
Prepare Environmental objectives and targets THDCIL-CO-F-EO-01 and Occupational Objectives THDCIL-CO-F-OH&SO-01.	Do
In order to achieve the objectives a programme (action plan) shall be established (as required).	Concerned HODs to prepare and MR to issue
In considering the means necessary to establish the action plan(s) the concerned HODs shall examine the resources required (financial, human, infrastructure) and the tasks to be performed. Depending on the complexity of the action plan established to achieve a particular objective, the department should assign responsibility, authority and completion dates for individual tasks to ensure that EMS/OH&S objective can be accomplished within the overall timeframe.	Concerned HODs to ensure
Where no such action plan is required, OCPs shall be established to ensure that activities related to the objectives are carried out in controlled conditions and objectives are achieved.	
Inform objectives and targets to the all concerned in the departments and monitor & review the achievement of targets.	Concerned HOD

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.4.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>QMS Planning</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	


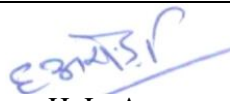
(Ref Clause ISO 9001 – 5.4.2, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 5.4.2 Quality management system planning

This Management Manual and its associated documents define how the requirement of quality of services provided by the Corporation is met. Top management ensures that planning is carried out in order to meet the requirements identified in Sub-section 4.1 as well as for achieving quality objectives at relevant functions and levels within the Corporation.

Planning includes identifying activities necessary to deliver the services, necessary resources, verification activities (such as inspections, reviews and audits), criteria for acceptability of service and processes, corrective actions and continual improvement in product and processes.

Top management ensures that planning is not just restricted to supply of services and achievement of objectives, but also during change in the Corporation and the Quality Management System. It is ensured that changes are planned to maintain integrity of the system and to prevent / minimize the risk of adverse effects on quality of service.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.5.1 &amp; 5.5.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>Responsibilities and Authorities</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001 – 5.5.1, ISO 14001 – 4.4.1, OHSAS 18001 – 4.4.1)

## 5.5.1 Responsibility and authority

Top management has defined responsibility, authority and interrelation of personnel, who manage, perform and verify work-affecting product / services offered by Corporation (Refer Annexure- 'C' for Organisation Chart of Corporate Office & Annexure- 'D' for responsibilities of CMD, Directors and Company Secretary. Refer Procedure manual for departmental Organisation Chart and Responsibilities & Authorities of various employees working in the department. In the case of absence, leave or otherwise of a designated person, responsibility and authority will transfer as per Corporation rules and regulations.


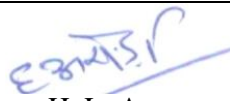
## 5.5.2 Management Representative

(Ref Clause ISO 9001:2008 – 5.5.2, ISO 14001:2004 – 4.4.1, OHSAS 18001:2007 – 4.4.1)

CMD has appointed a Sr. Executive of THDCIL as Management Representative for the effective development and implementation of QMS, EMS and OH&SMS in THDC INDIA LIMITED, Corporate Office, Rishikesh through an office order. Irrespective of his / her other responsibilities, he/she has responsibility and authority to:

- ensure that processes needed for the Quality Management System are established, implemented and maintained;
- ensure that an Environmental Management Systems and Occupational Health and Safety Management Systems are established, implemented and maintained in accordance with ISO 14001:2004 and OHSAS 18001 respectively;
- report performance of QMS to top management and any need for improvement in the review meetings;
- ensuring that reports on the performance of EMS/OH&SMS are presented to top management for review and used as a basis for improvement of the OH&S management system.
- ensure the promotion of awareness of customer requirements throughout the Corporation.

He/ She is also responsible for liaison with external agencies on matters relating to QMS/EMS/OH&SMS.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.5.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Communication, Participation and Consultation</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 4</b>	

(Ref Clause ISO 9001 - 5.5.3, ISO 14001 – 4.4.3, OHSAS 18001 – 4.4.3)

## 1.0 Purpose

To establish and maintain a system regarding communication on Environmental Aspects, OH&S Hazards, EMS and OH&SMS.

- a) Internal communication between various levels & functions in the Corporation and
- b) Communication with external interested parties.

## 2.0 Scope

This procedure is applicable for internal and external communications on Environmental Aspects, OH&S Hazards, EMS and OH&SMS.

## 3.0 Definition & abbreviations:


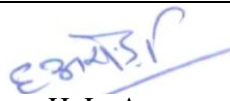
- Internal Communication - Communication with employees, contract workers & between different departments
- External Communication – Communication with external interested parties

## 4.0 Responsibilities

Legal Authorities : Concerned HOD to ensure

### 4.1 Description

<b>Activity</b>	<b>Responsibility</b>
<b>Internal Communication</b>	
Top management with the support of MR and HODs is responsible for ensuring effective communication (both upward and downward) within the Corporate Office, Rishikesh. To encourage communication from down to up, suggestion / feedback boxes are placed at easily accessible places. Top to bottom communication is through team briefings, office circulars, e-mails, IOMs. Notice - Boards available are at prominent places at Corporate Office, Rishikesh. Effective and fast verbal communication is carried out through use of EPABX extensions, landline telephones, mobiles and Walkee – Talkee.	HODs to ensure
Ensure that Environment Policy & Objectives, OH&S Policy & Objectives are communicated to all employees by putting boards at prominent places, display on the main gate of the company, distributing EMS and OH&S Objectives targets and Programs.	MR to ensure


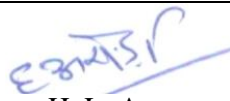
<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	5.5.3
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Activity	Responsibility
<p>Top management with the support of MR and HODs, ensures that communication takes place regarding effectiveness of QMS particularly the following listed points:</p> <ul style="list-style-type: none"> <li>a) Achievement of Objectives;</li> <li>b) Action points arising out of Management Review Meetings;</li> <li>c) Relevant part of internal / external audit findings;</li> <li>d) Customer complaints and the associated corrective actions;</li> <li>e) Preventive action arising out of analysis of data;</li> <li>f) Customer Communication related to department including complaints.</li> </ul>	Concerned HODs to ensure
Ensure availability of Environment, OH&S Policy / Objectives to all interested parties including contractors, subcontractors, when requested.	Concerned HOD
Ensure that employees are aware relevant Environmental Aspects, Occupational Hazard, Environmental & OH&S objectives, targets & programs and operation control procedures.	Concerned HOD/ Functional Head
<b>Internal Communication regarding environmental and OH&amp;S issues</b>	
Receive suggestion/ concerns of employees in their respective areas and record the details in internal communication record THDCIL-CO-F-IC-01.	Concerned HOD
Review the suggestions and concerns.	Concerned HOD along with Top Management and Concerned FH/MR (as required)
Take necessary correction action (as decided) and inform the concerned person.	Do
<b>Communication with Authorities &amp; Govt. Departments:</b>	
All evidence of legal compliance including monitoring data as required under legal requirement will be communicated to concerned authorities only as per requirements with approval of concerned HOD.	Concerned HOD to ensure
<b>External Communication</b>	
Information related to all relevant communications received from external parties will be shared with them.	Concerned HOD through MR
Information related to all significant aspects/ risks shall be provided to external agencies as required.	Concerned HOD through MR
OH&S issues can all be communicated to visitors and contractors via different means like: <ul style="list-style-type: none"> <li>- OH&amp;S briefings and meetings</li> <li>- Newsletters, posters, e-mails, suggestion boxes, websites and notice boards.</li> </ul>	Concerned HOD to ensure
After receipt of the external communication from interested parties/legislative agencies/ Ministries and other interested parties relating to Environmental aspects & OH&S hazards and environmental & OH&S performance of the Corporation same will be recorded in external communication register THDCIL-CO-F-EC-01.	Concerned HOD


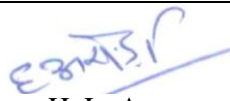
<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.5.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Communication, Participation and Consultation</b>	<b>Date</b>	<b>04-03-2013</b>
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<b>Activity</b>	<b>Responsibility</b>
In case the communication is regarding reveal of information, take approval of competent authority and share the gathered information with the concerned interested party.	Concerned HOD to ensure
In case the communication is related to complaint on any environmental aspect/ OH&S hazard, discuss the same with concerned department and gather required information.	Concerned HOD
Coordinate with concerned FH for immediate mitigative action.	Concerned HOD
Take necessary correction action and inform the concerned interested party about the same.	Concerned HOD
Analyse the problem and implement corrective action (if required) to prevent recurrence of problem.	Concerned HOD along with Concerned FH (as required)
All the contracts will incorporate performance requirements of Environmental and OH&S issues so that contractors are updated for these requirements, before acceptance of the work.	HOD Contracts
Submit the summary of all internal/ external communications to MR.	Concerned HOD's
Put the summary of communication for discussion in MRM.	MR
<b>Participation and Consultation (ISO 9001 – N/a, ISO 14001: N/a, OHSAS 18001 – 4.4.3.2)</b>	
Worker unions shall be having active participation during following activities: <ul style="list-style-type: none"> <li>- Identification of hazards and risks – Acceptance will be taken from unions, so that they are satisfied on the same.</li> <li>- Risk assessment – Acceptance will be taken from unions.</li> <li>- Development of OH&amp;S objectives/ OCPs/ Action plans – Acceptance will be taken from unions.</li> <li>- Incident investigation – As per procedure manual of P&amp;A</li> </ul>	Functional Head (Safety Group under Administration)
In order to have active participation of employees, workers & supervisors on OH&S matters, consultation meetings will be conducted at least once in six months.	Functional Head (P-R & IR.)
Apart from other issues, specific discussion on following will be the mandatory input of these meetings: <ol style="list-style-type: none"> <li>1. Any OH&amp;S related problem.</li> <li>2. Any issues related to facilities, which can lead to improvement of OH&amp;S performance.</li> <li>3. Review of Occupational Risk analysis.</li> <li>4. Review of OH&amp;S objectives, targets and programs.</li> <li>5. Review of any relevant internal/ external OH&amp;S related communication.</li> <li>6. Any suggestion from participants related to change in controls implemented, introduction of new technology etc.</li> </ol>	Functional Head (Safety Group under Administration)

<i>Prepared by</i>	<i>Reviewed by</i>
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## THDC India Limited, Corporate Office Rishikesh

### Management Manual

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Activity	Responsibility
The process of meeting and further action will be carried out as per procedure manual of IR & Welfare section.	Functional Head (IR & Welfare)
In case there is any change which can affect OH&S issues of contractor, the same will be informed to them and acceptance of necessary action will be taken from them.	Concerned Engineer In-charges

### Records

Form No.	Title	Location	Retention Period	Disposal authority
THDCIL-CO-IC-F-01	Internal Communication Register	Concerned HOD office	3 years	Concerned HOD
THDCIL-CO-EC-F-02	External Communication Register	Concerned HOD office	3 years	Concerned HOD

Prepared by

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SM (QA – Civil & ISO) & Dy. MR

Reviewed by

H. L. Arora  
GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	5.6
	Revision No.	00
<b>Management Review</b>	Date	04-03-2013
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(Ref Clause ISO 9001– 5.6, ISO 14001– 4.6, OHSAS 18001– 4.6)

## General

Top management reviews the organization's quality, environmental and OH&S management system, at defined interval, to ensure its continuing suitability, adequacy and effectiveness. These reviews assess opportunities for improvement and the need for changes in QMS, EMS & OH&SMS, including the quality/environmental/OH&S policy, quality objectives, Environmental and OH&S objectives.

The reviews will be held at two levels - Corporate Level & Departmental Level.

CMD will chair the Corporate level management review meeting, which will be held at least once in **Six** months.


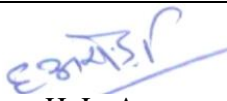
The participants in the Corporate Level Management Review Meeting (MRM) are:  
CMD, Directors, All HOD's, Section Heads, MR & Dy. MR.

Department Head will chair the departmental management review meeting of his / her department, which will be held at least once **every quarter** of the year, i.e. once in every **three months**. The participants in the Departmental Level Management Review Meeting (MRM) are: Head of Department, Nodal officer, other Employees of Department as desired.

Chair person of different meetings at respective level may permit any other person to attend MRM as invitee / guest.

Records of Corporate MRM will be prepared in the form of minutes (THDCIL-CO-F-MRM-01) with MR, which will be circulated to all HODs.

Records of departmental MRM will also be prepared in the form of minutes (THDCIL- CO-F-MRM-01) with Nodal Officer, which will be circulated to all Functional Heads of their departments.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>5.6</b>
	<b>Revision No.</b>	<b>00</b>
<b>Management Review</b>	<b>Date</b>	<b>04-03-2013</b>
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## 5.6.2 Review Input

The agenda of meeting for different levels of MRM will be as follows:

<b>Agenda points for Corporate level MRM</b>	<b>Agenda points for Departmental MRM</b>
<ol style="list-style-type: none"> <li>1. Follow up of previous management reviews.</li> <li>2. Review of Quality, Environmental and OH&amp;S Policy.</li> <li>3. Corporate level QMS objectives</li> <li>4. NCs identified during external audit.</li> <li>5. Review of status of internal audit NCs.</li> <li>6. Output from departmental MRM (as per requirement).</li> <li>7. Customer feedback including complaints.</li> <li>8. Communication from external interested parties.</li> <li>9. Status of incident investigations, corrective actions and preventive actions.</li> <li>10. Changing Circumstances, including developments in legal and other requirements related to Corporation, environmental aspects and OH&amp;S requirements.</li> <li>11. Recommendations for improvement.</li> <li>12. Any other point with the permission of chairperson.</li> </ol>	<ol style="list-style-type: none"> <li>1. Follow up of previous management reviews.</li> <li>2. Results of audit findings related to department.</li> <li>3. Review of departmental quality objectives, EMS and OH&amp;S objectives.</li> <li>4. Evaluation of compliance of applicable legal requirements and other requirements</li> <li>5. Process performance and Product/ Service Conformity.</li> <li>6. OH&amp;S and EMS Performance related to activities performed by department</li> <li>7. Customer Feedback including complaints/ Suggestions.</li> <li>8. Communication from interested parties.</li> <li>9. Results of participation and consultations (only if department is a part of such consultations)</li> <li>10. Status of Corrective/ preventive action.</li> <li>11. Recommendations for improvement.</li> <li>12. Changes that could affect QMS, EMS and OH&amp;SMS.</li> <li>13. Any other point with the permission of chairperson.</li> </ol>

## 5.6.3 Review output

Top management should ensure that specific actions are identified for the improvement in the products, effectiveness of QMS, EMS, OH&S and its processes. Resources required for effective implementation and improvement of QMS, EMS and OH&S should also be identified. Possible changes to quality/environmental/OH&S Policy, environmental objectives and targets.

MR/Nodal Officer is responsible for monitoring the progress and completion of various actions decided in MRM in the planned time frame.


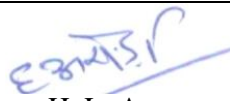
### Criteria to ensure that Management review process is effective

Effectiveness of operation and control on process (Management Review) is reviewed through periodic internal audits by internal auditor. In addition to this MR informally review and monitor that time bound Management Review action points are being achieved and remarks regarding progress recorded after completion of target date, and if action was not implemented in defined time frame, the same is analysed and discussed in subsequent meeting.

Records will be kept for any non-conformity observed during any such informal reviews in internal audit NCR format.

### Records:

<b>Form No.</b>	<b>Title</b>	<b>Location</b>	<b>Retention period</b>	<b>Disposal authority</b>
F-MRM-01	Minutes of MRM	Office	2 yrs	MR for Corporate Level/ Concerned HOD for Departmental Level

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>6.1 &amp; 6.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>Resource Requirement</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

## Provision of resources

The management has determined and provided human resources, plant and machinery, utilities and work environment for implementing, maintaining and improving the effectiveness of quality management system, as well as for enhancing customer satisfaction by meeting their requirements.

(Ref Clause ISO 9001 – 6.2.1, ISO 14001 – 4.4.2, OHSAS 18001 – 4.4.2)

## Human resources - General

The management ensures that personnel performing work affecting conformity to product requirements OR performing tasks for it or on its behalf that have a potential to cause a significant environmental impact OR performing tasks that can impact on OH&S are competent on the basis of appropriate education, training, skills and experience.

Documents related to education are verified and collected at the time of appointment (refer procedure manual of P&A) and other educational qualifications gained during working in THDCIL are filed in service records (refer procedure manual of P&A).

The detailed procedure for identification of training needs of employees, imparting training and for monitoring effectiveness of training imparted is defined in procedure manual of HRD Department.


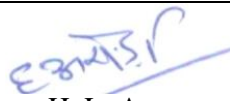
Concerned HOD of all departments at Corporate office will ensure that the personnel working for it and on its behalf are aware of:

1. The importance of conformity with the environment policy and procedures and with the requirements of the environmental management system.
2. The significant environmental aspects and related actual or potential impacts associated with their work and the environmental benefits of improved personal performance.
3. The roles and responsibilities in achieving conformity to the requirements of environmental management system and
4. The potential consequences of departure from specified procedures.

By:

1. Providing a copy of environmental aspect register and Occupational Hazard Analysis before engaging them for work.
2. Providing a copy of Objectives, Targets and Programmes for significant environmental aspects and risks during signing of agreement.
3. Providing a copy or reference of Emergency Preparedness and Response Program.
4. By providing environment and OH&S policy.

HOD and Nodal officer will update the personnel in the department regarding these points during various formal/ informal meetings/ management review meetings/ while reviewing the process performance.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>6.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Infrastructure</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001 – 6.3, ISO 14001 – N/a, OHSAS 18001 – N/a)


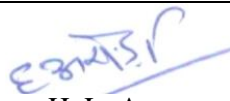
## Infrastructure

The Corporation has determined, provided and maintained the infrastructure needed to achieve conformity to services delivered.

Corporation is having good fixed assets for transportation, communication and working:

THDC INDIA LIMITED is located at Pragatipuram, Bye Pass Road, Rishikesh, Dist.-Dehradun (Uttarakhand). The campus of THDC INDIA LIMITED Corporate office has a covered area of 54230 Sq. Meter and open area of 453875 Sq. Meter. The Company has a well furnished office with facilities like Computers, Internet, Telephone, Fax; and utilities like – Guest House, Canteen, Bank, Staff Colony etc.

The detailed procedure on maintenance of utilities, transport vehicle, communication system, DG Sets and information system is defined in procedure manual of the respective departments, who are responsible for carrying out maintenance.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	6.4
	Revision No.	00
<b>Work Environment</b>	Date	04-03-2013
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(Ref Clause ISO 9001 – 6.4, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 6.4 Work environment


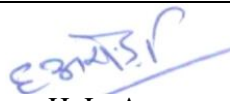
Well-furnished office with associated communication facilities enable personnel to give full efficiency.

Fire Extinguishers are installed at appropriate places for use in emergency fire situations.

Apart from this, proper work environment is provided and maintained to carry out the work to achieve conformity to service requirements. The work environment includes facilities like lights, cleanliness, safety, hygiene, heat, humidity, air flow, noise etc.

Regular cleaning of building and work place is carried out. The employees follow practices of good house-keeping.

Services department is responsible to arrange for proper house-keeping and cleanliness.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>Planning of Product Realisation</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001 – 7.1, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 7.1 Planning of product realization


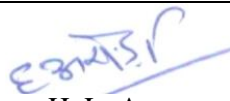
The organization has planned and developed the processes needed for service realization. Planning of product realization is in line with requirements of other processes of Quality Management System.

In planning product realization, followings are determined:-

- a) Quality Objectives & requirements for the services.
- b) Established processes, documents and provide recourses as required for the service realization.
- c) Required verification, validation, monitoring, measurement, inspection and test activities required for the service and the criteria for the service acceptance.
- d) Records needed to provide evidence that the realization processes and resulting services meet the service requirements.

Processes of THDC INDIA LIMITED have been listed out in Procedure Manuals of different departments, wherein how the processes are planned for execution, are detailed along with their lead time and the documents generated. The format for executing a process, as detailed in the Procedure Manual is as follows:

<b>Sl. No.</b>	<b>Activities</b>	<b>Document / Generated file no.</b>	<b>Lead Time</b>	<b>Remarks (Related file name)</b>

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	7.2
	Revision No.	00
<b>Customer Related Processes</b>	Date	04-03-2013
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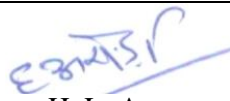
(Ref Clause ISO 9001 – 7.2, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 7.2 Customer-related processes

Various departments of Corporate Office determine the needs & requirements of their customers and after adequate review of their requirements provide requisite services as per procedures defined in the procedure manual of respective departments.

The relevant statutory and regulatory requirements related to the services offered by different departments are determined and listed in the procedure manuals of respective departments.

Communication with customers on different aspects like product information / customer requirements/ customer feedback including customer complaints (as applicable), will be carried out by concerned departments as per their respective procedure manuals.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Design and Development</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 3</b>	

(Ref Clause ISO 9001 – 7.3, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 7.3 General:

The organization is involved in providing consultancy & designs for power projects / power plants and other projects entrusted to THDC India Limited.

HOD Hydro mechanical, Electro-Mechanical Design and Civil Design are primarily responsible for design activities. The detailed design procedure is documented in Procedure Manual of Electro- Mechanical- Design department and Civil & Hydro Mechanical Design department.

### Design Planning:

On receiving information regarding allocation of a project to THDC INDIA LIMITED by State Government/ Ministry of Power. HOD (Design department, Civil/ Electro-mechanical, Hydro-mechanical) will prepare detailed project planning in consultation with different departments. Detailed procedure for design planning and approval is documented in Procedure manual of HOD (Design department, Civil/ Electro-mechanical, Hydro-mechanical).

During design planning, the concerned department determines:

- a. the detailed design and development stages.
- b. the review, verification and validation as appropriate to each design and development stages.
- c. the responsibilities and authorities for design and development.


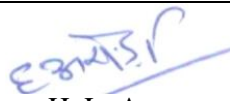
### Design input:

The inputs for project will be received from other apex bodies like State Governments, Ministry of Power, NRSA, GSI, Survey of India Central Electricity Authority, Central Water Commission, PFR/FR/DPR etc., and from the previous experience of the Corporation on same kind of projects.

Necessary design inputs will be collected from various sources, Design input includes:

- a. functional and performance requirements
- b. applicable statutory and regulatory requirements
- c. information derived from previous similar designs
- d. the preliminary and detailed field data (hydrological, seismic, structural, geological and topographical), soil & rock property tests etc.
- e. requirements from other apex bodies like State Governments, CEA, CWC, Ministry of Power etc.
- f. requirements stated by other involved departments.
- g. Other Indian and International standards

The design input details are documented in Procedure Manual of Electro- Mechanical Design department, Civil- Design department and Hydro-mechanical department.

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## THDC India Limited, Corporate Office Rishikesh

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#### Design Output:

The output of design and development activities will be in different types and stages e.g. detailed design requirements like specifications/ drawings/ calculations / Quality Assurance Plan (QAP) / Bill of Quantity (BOQ) etc.

The above designs may be submitted by different/single agency/department to THDC INDIA LIMITED. The same will enable verification against design and development input and will be approved prior to release.

Design and Development output will also ensure:

- that output has met the input requirements
- will provide appropriate information for contract department, project commissioning.
- will contain acceptance criteria for product.
- will also specify the characteristics of the product that are essential for its safe and proper use.

The design output details are documented in Procedure Manual of Electro- Mechanical Design department, Civil- Design department and Hydro mechanical department.

#### Design Review:

Design reviews will be conducted at various levels/ stages of drawings, design and will involve various departments/ agencies.

These reviews are conducted to:

- evaluate the ability of the results of design and development to meet requirements and
- to identify any problems and propose necessary actions.
- to review progress on design and development activities.
- to have co-ordination among different departments/agencies.
- to decide any changes required in further course of action.

The design output details are documented in Procedure Manual of Electro- Mechanical Design department, Civil- Design department and Hydro mechanical department.

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### Design Verification:

The design outputs generated at different stages will be verified by competent authority / agency, to ensure that the design and development outputs have met the design and development input requirements.

In case any verification is to be obtained from other department / agency, it will be sent to them for vetting/comments.

The design output details are documented in Procedure Manual of Electro- Mechanical Design department, Civil- Design department and Hydro mechanical department.

### Design Validation:

Design validation will be conducted at different stages to verify that the in-process and final product meets the requirement.

The design and development validations shall be performed in accordance with planned arrangements i.e. the method and extent of validation identified in design planning.

### Design Changes:

Based on the feedback/ suggestions from the project, CEA, CWC etc, changes may be initiated on account of site constraints or other reasons. The changes will be reviewed, verified and validated and approved, as required before implementation.

The review of design and development changes will include evaluation of the effect of the changes on constituent parts and product already delivered. The design output details are documented in Procedure Manual of Electro- Mechanical Design department, Civil- Design department and Hydro mechanical department.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.4</b>
	<b>Revision No.</b>	<b>00</b>
<b>Purchase</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001:2008 – 7.4, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 7.4 Purchasing

There are two types of material purchase in THDC INDIA LIMITED, one is material/product related to Corporate Office, Rishikesh, and other is purchase of miscellaneous material/product / services.

Individual department will initiate the requirement of material and it will be sent to MM / Procurement department. The procedure for purchasing will be carried out as per documented procedure in Procedural Manual of MM / Procurement department.

Other purchases will be done as per DOP and Procurement Policy-2009 of THDC INDIA LIMITED.

Respective department will ensure following during purchasing process


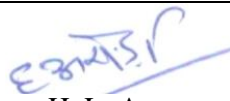
- requisite type and extent of control on purchased product/service;
- purchased product/service conforms to the requirements;
- purchase information is adequately defined in purchase orders/ work orders/ contract agreement, including approval for product/services, procedure, processes and equipments (which ever applicable).
- requirement of inspection and testing arrangements (as applicable);
- requirement of investigation reports or test certificate etc.

### Verification of Purchased Product

Verification of purchased product will be done as per below mentioned process (as applicable):

- Representative of concerned department will visit supplier site for verification of product or verify the product at THDCIL store against the purchase requirement.
- Other purchases if done by other departments (as per DOP and Purchase Policy), verification of purchased item will be carried out by concerned department against the purchase information.

Detailed procedure for material acceptance and store receipt is established in Procedure manual of Stores department.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.5.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>Production and Service Provision</b>	<b>Date</b>	<b>04-03-2013</b>
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(Ref Clause ISO 9001 – 7.5.1, ISO 14001 – 4.4.6, OHSAS 18001 – 4.4.6)

## 7.5 Production and Service Provision

### 7.5.1 Control of production and service provision

Corporate office, THDC INDIA LIMITED has identified and planned the processes required for providing services to its customers. Concerned HODs of different departments ensure that all these processes are carried out under controlled conditions as defined in Procedure Manual of respective department, which includes:


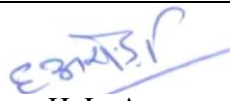
- The availability of information that describes the characteristics of the services.
- The availability of work instructions (wherever required)
- The use of suitable equipment.
- The availability and use of monitoring and measuring equipment.
- Implementation of monitoring and measuring of processes.
- The implementation of procedure for service releases, delivery and post-activities.

THDCIL has identified and planned operations that are associated with the identified significant environmental aspects (refer environmental aspect register THDCIL-CO-F-AR-01). These are consistent with the environmental and OH&S policy, environmental objectives and targets, and ensures that they are carried out under specified conditions by:

- Establishing, implementing and maintaining documented Operation Control Procedures (OCPs) and Work Instructions to control situations where their absence could lead to deviation from the environment policy, environmental objectives and targets.
- Stipulating the operating criteria in the Operation Control Procedures.
- Communicating these operational procedures, in case it is required to the contractors as well suppliers to adhere.
- Establishing, implementing and maintaining documented OCPs related to significant environmental aspects of product and services provided by Corporate Office, Rishikesh.

THDCIL has also determined those operations and activities that are associated with the identified hazards and where the implementation of controls is necessary for to manage the OH&S risks (refer occupational hazard and risk analysis THDCIL-CO-F-OH&R-01). For these operations and activities, THDCIL has implemented and maintained:

- Controls related to purchased goods, equipments and services.
- Controls related to contractors and other visitors to the workplace.
- Documented Operation Control Procedures and operating criteria to cover the situations, where their absence could lead to deviation from the OH&S policy, OH&S objectives.

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## THDC India Limited, Corporate Office Rishikesh


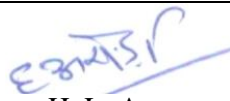
<b>Management Manual</b>	Section No.	7.5.2
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<b>Validation of Processes for Production and Service Provision</b>	Date	04-03-2013
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(Ref Clause ISO 9001 – 7.5.2, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 7.5.2 Validation of processes for production and Service provision (Exclusion)

This clause is excluded from the scope of QMS, as there is no special process available (in the Corporation) whose output cannot be verified by subsequent monitoring or measurement.

Hence, the clause is 'excluded' from the scope.

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## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.5.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Identification and Traceability</b>	<b>Date</b>	<b>04-03-2013</b>
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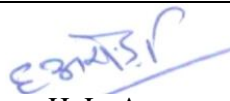
(Ref Clause ISO 9001 – 7.5.3, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 7.5.3 Identification and Traceability

Corporate office THDC INDIA LIMITED ensures that different offices, buildings and other infrastructure are suitably identified by means of sign boards etc.

All the files/ registers generated during delivery of services are identified by file/register/other relevant document numbers. The numbering system for all documents will be maintained as per procedure manuals of different departments.

All the services rendered are traceable by referring different files/registers, which contain details of processes followed and personnel involved in extending those services.

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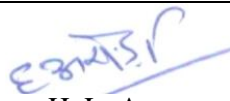
## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	7.5.4
	Revision No.	00
<b>Customer Property</b>	Date	04-03-2013
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(Ref Clause ISO 9001 – 7.5.4, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 7.5.4 Customer property

Corporate office receives a lot of information from various hydro power plants and projects for further execution of services to them, all the concerned departments ensure that adequate care is taken to identify, verify, protect and safeguard all the customer property received from all levels of customers. In case of any customer property being found lost/damaged or otherwise found to be unsuitable for use, the same shall be reported to the customer and records for the same will be maintained by respective departments.

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## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>7.5.5</b>
	<b>Revision No.</b>	<b>00</b>
<b>Preservation of Product</b>	<b>Date</b>	<b>04-03-2013</b>
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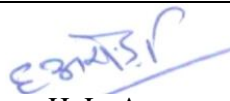
(Ref Clause ISO 9001 – 7.5.5, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 7.5.5 Preservation of product

THDC INDIA LIMITED receives few materials for storage for issuing to concerned users at a later date. During this period, following is ensured:

- a) preserving the conformity of product during storage;
- b) identification, handling and issuing the stored material in good condition.

Detailed procedure of storage is described in Procedure Manual of Stores Dept.

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Sub - Section No.</b>	<b>7.6</b>
	<b>Revision No.</b>	<b>00</b>
<b>Control of monitoring and measuring equipments</b>	<b>Date</b>	<b>04-03-2013</b>
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(Ref Clause ISO 9001– 7.6, ISO 14001 – 4.5.1, OHSAS 18001 – 4.5.1)

## 7.6 Control of monitoring and measuring equipments

To ensure that the services offered by THDC INDIA LIMITED to all its customers, feedback forms have been developed for measuring the output of the services offered to its customers. These forms have been developed and verified / calibrated by MR / HOD of relevant department to ensure that the forms so developed are suitable to get the feedback / comments on all the service areas.

For offering services, few departments of THDC INDIA LIMITED use Monitoring and Measuring equipment (MMEs), control of which has been addressed in the Procedure Manual of respective deptts.


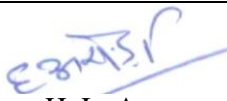
Concerned departments at Corporate office have identified the monitoring and measuring equipments (refer THDCIL-CO-F-CAL-01) required to monitor and measure:

1. The key characteristics of its operations that can have a significant environmental impact.
2. The effectiveness of controls (for health as well as for safety).
3. The extent to which the organization's OH&S objectives are met
2. The product characteristics required to provide conformity of product to determined requirements (as applicable).

The concerned officer in-charge has to ensure that:

1. The monitoring and measuring equipments used for these activities are calibrated/ verified at defined interval/frequency or prior to use.
2. Equipments being calibrated by external agency, ensure that they are calibrated before due date.
3. After receipt of the MME's the indicated error will be reviewed and it will be ensured that all the errors are within acceptable limit.
4. Ensures that while handling the measuring equipment is protected from damages, jerks etc.

Note – Monitoring and Measuring equipments used to monitor the product characteristics have to be calibrated against measurement standards traceable to international or national measurement standards; and ensure that where no such standard exists, the basis used for calibration or verification is recorded.

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# THDC India Limited, Corporate Office Rishikesh


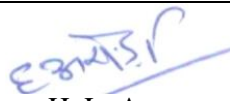
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## Criteria to ensure that process of calibration is effective

Effectiveness of operation and control on process (calibration of Monitoring and Measuring equipments) is reviewed through periodic internal audits by internal auditor. In addition to this Management informally reviews and monitors that:

- Only calibrated MMEs are used.
- Calibrated instruments are properly handled and stored to ensure accuracy and fitness for use.
- Errors obtained in calibration report are under acceptable limit.
- All equipments shall be calibrated within the currency of valid certificate.
- Wherever traceability is a requirement, it should be ensured that same is available with calibration certificate.

Records will be kept for any non-conformity observed during any such informal reviews in internal audit NCR format.

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## THDC India Limited, Corporate Office Rishikesh


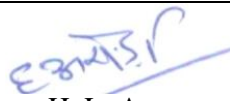
<b>Management Manual</b>	<b>Section No.</b>	<b>8.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>Measurement, analysis and improvement (General)</b>	<b>Date</b>	<b>04-03-2013</b>
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(Ref Clause ISO 9001- 8.1, ISO 14001:2004 – N/a, OHSAS 18001:2007 – N/a)

### 8.1 Measurement, Analysis and Improvement – General

Corporation has planned and implemented the monitoring, measurement, analysis and improvement processes needed:

- a) to demonstrate conformity to the service requirements (refer subsection 8.2.4 of this manual);
- b) to ensure conformity of the Quality Management System (refer 8.2.2 of this manual); and
- c) to continually improve the effectiveness of the QMS (refer 8.5 of this manual)

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.2.1</b>
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<b>Customer Satisfaction</b>	<b>Date</b>	<b>04-03-2013</b>
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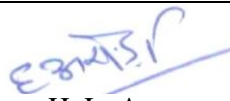
(Ref Clause ISO 9001 - 8.2.1, ISO 14001 – N/a, OHSAS 18001 – N/a)

## 8.2.1 Customer Satisfaction

Corporation has established a mechanism to monitor information relating to customer perception as to whether the organization has met customer requirements or not including promoters & beneficiaries. Corporation gathers information by following means to know customer perception:

- Feedback from hydropower projects and power plant(s), (refer procedure manual of OMS, QA & safety dept.).
- Feedback from beneficiaries - (refer procedure manual of Commercial dept.).
- Feedback from internal customers – (refer procedure manual of various departments)

Data obtained through these activities is analysed to see whether customer is satisfied with Corporation's product and services.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	8.2.2
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(Ref Clause ISO 9001 - 8.2.2, ISO 14001 – 4.5.5, OHSAS 18001 – 4.5.5)

## 8.2.2 Internal Audit

THDCIL Corporate office, has established a system for carrying out internal audits at planned intervals to determine whether the management systems:

- conforms to the planned arrangements, to the requirements of QMS, EMS and OH&SMS requirements established by the organization; and
- were effectively implemented and maintained.


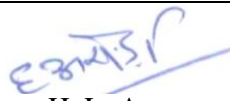
### Procedure:

Corporation has established and implemented a documented procedure for conducting internal audits at **Six monthly** intervals to verify that the planned arrangements, defined in procedures/ Procedure manual or work instructions/specifications, are effective to meet the requirements of the standard and the actual resources available are sufficient to meet the requirements of the **QMS**, as defined in its documents.

#### Description: Procedure

The below mentioned procedure describes about the process in which internal audits are conducted after specified intervals. The procedure describes the responsibilities and requirements for planning and conducting audits, establishing records and reporting results. MR / Nodal officers are overall responsible for implementation of this procedure.

Activity	Responsibility
Prepare Annual Audit Plan THDCIL-F-CO-MR-02, keeping in mind the following things: a) All the departments / activities covered under QMS/EMS/OH&SMS scope are to be audited once in six months. b) Plan should be based on status and importance of the activity to be audited. c) Areas having large number of Non-conformities in the earlier audits may be audited more frequently than stated in (a) above.	MR
Based on Annual Audit Plan, prepare & circulate Audit schedule THDCI-F-CO-MR-03. Detailing details of departments, auditors & timings in advance. Audit schedule should define audit criteria and the scope. While preparing schedule: - ensure that only trained auditors independent of the activity to be audited shall be deputed for conducting the audit. - ensure availability of auditor & auditee while preparing schedule.	MR
Circulate the Internal Audit Schedule to all HODs, auditors and nodal officers.	MR


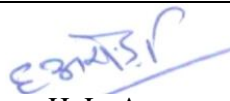
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.2.2</b>
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<b>Internal Audit</b>	<b>Date</b>	<b>04-03-2013</b>
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<b>Activity</b>	<b>Responsibility</b>
In case of any change due to request from auditee or auditor, Dy. MR may need to revise the audit schedule (only the affected portion).	Dy. MR
Go through the relevant documentation (Procedures & Work Instructions and previous reports, if any).	Auditors
Carry out audit of department / activity for checking compliance & effectiveness of QMS/EMS/OH&SMS. Where there is a difference of opinion with the auditee, contact MR and resolve it.	Internal Auditor / Consultant/ MR
If nonconformity is observed, collect details of nonconformity such as date, relevant records detail and document it in the Non-Conformity Report NCR THCIL-F-CO-MR-04.	Internal Auditor / Consultant/ MR
Obtain acceptance on the Non-conformity from the Nodal Officer/HOD of Auditee Department on and submit original copy of acknowledged Non-conformity to MR.	Internal Auditor/ MR
The auditor also verifies NCs found during the previous audits & review the effectiveness of the corrective action taken.	Internal Auditor/ MR
Handover photo copy of the NCR to the auditee for necessary root cause analysis, Correction action and Corrective action.	Internal Auditor/ MR
Handover photo copy of the audit observation sheet THCIL-F-CO-MR-10 to the auditee for necessary action.	Internal Auditor/ MR
After taking adequate action on observations, the action taken report should be submitted to MR along with evidence of action taken.	Head auditee Dept.
On implementation of correction/corrective action, inform MR for initiating the closing process.	Head auditee Dept.
Conduct the root cause analysis, necessary correction action and corrective action along with target dates and send it to MR at the earliest.	HOD to ensure
In case of observations, prepare the action taken report and submit the same along with the evidence of closure to MR within the timeline which is informed to auditor/ Dy. MR/ MR.	HOD to ensure
Inform MR or Dy. MR about own availability and decide date, for auditor visit for closure of Non-Conformity.	Nodal Officer/ HOD
Arrange auditor for verification of correction and corrective action & close the NCR after the target date decided by auditee. (Try to send same auditor who has done initial audit). In case the auditor is not available on the agreed date, MR/ Dy. MR will visit the auditee department and close non-conformity after verification of correction and corrective action.	MR/ Dy. MR to ensure

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.2.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>Internal Audit</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 3 of 3</b>	

<b>Activity</b>	<b>Responsibility</b>
Verify correction and corrective action and If found satisfactory, close NCR, otherwise keep the NCR open and take acknowledgement of Nodal Officer/ HOD of auditee department.	Internal Auditor
Send the original NCR after closure/ or after keeping it open to MR.	Internal Auditor
If no nonconformities are found during an audit as per ISO standard and relevant documentation, don't dig for NCR. Close the audit saying the samples evaluated were found complying with the stated requirements, however it is not a 100% audit.	Do
Prepare Audit Summary Report THDCIL-CO-F-MR-05 & include the same for discussion in Management Review Meeting.	MR

### Criteria to ensure that process of internal auditing is effective


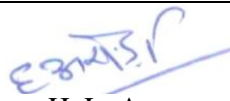
Effectiveness of Procedure and control on process (internal auditing) is reviewed through periodic internal audits by internal auditor. In addition to this, MR informally reviews and monitors that:

- Internal audits are conducted as per plan.
- Time bound Corrective actions are taken against internal audit NCR's and these actions are effective.
- NCRs identified in internal audits are not of repetitive nature.
- No. of NCs identified by second party / third party auditors are less then those identified in internal auditors / consultants.
- Audit observations are closed within the agreed timeline.
- The action taken report along with the evidence of closure is submitted to MR within the agreed timeline.

Records will be kept for any non-conformity observed during any such informal reviews in internal audit NCR format.

### Records:

<b>Form No.</b>	<b>Title</b>	<b>Location</b>	<b>Retention period</b>	<b>Disposal authority</b>
THDCIL-CO-F-MR-02	Internal Audit Plan	MR Office	3 Years	Management Representative
THDCIL-CO-F-MR-03	Internal Audit Schedule	Do	3 Years	Do
THDCIL-CO-F-MR-04	Non-Conformity Report	Do	3 Years	Do
THDCIL-CO-F-MR-05	Internal Audit Summary Report	Do	3 Years	Do
THDCIL-CO-F-MR-10	Audit Observation Sheet	Do	3 Years	Do

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.2.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Monitoring and Measurement of Processes</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 2</b>	

(Ref Clause ISO 9001 - 8.2.3, ISO 14001 – 4.5.1&4.5.2, OHSAS 18001 – 4.5.1&4.5.2)

## Monitoring and measurement of processes

**(FOR QMS)**


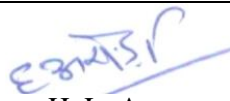
All the processes are carried out as per the relevant procedure manual for respective departments. The output of these processes is monitored against the specified criteria/parameters. Recurrent deficiencies are analysed for their causes. If the analysis reveals any deficiency in the process, suitable corrective action is taken to avoid the recurrence of those deficiencies.

When planned results are not achieved, correction and corrective action are taken to ensure conformity of the product as per Sub-section 8.5 of this Management Manual.

**(FOR EMS and OH&SMS)**

THDCIL has identified the key characteristics of its operations and activities that can have significant environmental impacts and significant hazards (refer Aspect register and Occupational Hazard Analysis).

<b>Activity</b>	<b>Responsibility</b>
<b>Monitoring of Key Characteristics</b>	
THDCIL has established Environmental objectives and targets as listed in THDCIL-CO-F-EO-01 and OH&S objectives and targets as listed in THDCIL-CO-F-OH&SO-01. THDCIL has also identified the responsibility, resources required, monitoring and measuring frequency, details of applicable operational control procedure in THDCIL-F-CO-EO-01 and THDCIL-CO-F-OH&SO-01.	MR in consultation with other concerned HODs
These key characteristics of the activities related to significant environmental aspects/ occupational hazards, are monitored as per frequency defined in objectives, targets and programs (THDCIL-F-CO-EO-01 and THDCIL-CO-F-OH&SO-01).	As per THDCIL-F-CO-EO-01 and THDCIL-F-OH-01
Maintain the records of monitoring.	Do
In case of situations related to ill health, incidents (including accidents, near-misses etc), which arised as a result of functioning in THDCIL, the records for same will be maintained in hospital, and necessary corrective and preventive actions will be initiated to avoid the recurrence of the same and to ensure removal / avoidance of any potential non-conformity(s).	CMO along with HOD of the concerned department(s)
<b>Evaluation of Compliance</b>	
Ensure that compliance to applicable legal requirements and other requirements is up to date.	Concerned HOD

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.2.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Monitoring and Measurement of Processes</b>	<b>Date</b>	<b>04-03-2013</b>
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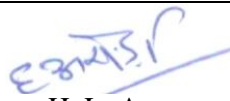
<b>Activity</b>	<b>Responsibility</b>
Ensure that all the statutory returns and other requirements are up to date and maintained as per frequency..	Concerned HOD
Ensure that all the statutory returns and other requirements are up to date and maintained as per frequency.	Concerned HOD

Concerned HOD's will ensure that these parameters are monitored. Concerned HOD's will ensure that in case of any deviation, same will be recorded in non-conformity register THDCIL-CO-F-NCS-02 (EMS/OHS&MS) and will be dealt as per section number 8.3 of this management manual.

Reference: Concerned Return files  
 Concerned Approval Files  
 Monitoring records of EMS and OH&S objectives

### Records:

<b>Form No.</b>	<b>Title</b>	<b>Location</b>	<b>Retention Period</b>	<b>Disposal authority</b>
THDCIL-CO-F-EO-01	Environmental objectives, targets and programs	MR Office/ Concerned Functional Head office	Forever	-
THDCIL-CO-F-OH&SO-01	OH&S objectives	MR Office/ Concerned Functional Head office	Forever	-
THDCIL-CO-F-LR-01	List of applicable legal and other requirements	MR Office/ Concerned Functional Head office	Forever	-
THDCIL-CO-F-LR-02	List of statutory returns	MR Office/ MR Office/ Concerned Functional Head office	Forever	-

<i>Prepared by</i>	<i>Reviewed by</i>
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## THDC India Limited, Corporate Office Rishikesh


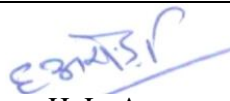
<b>Management Manual</b>	Section No.	8.2.4
	Revision No.	00
<b>Monitoring and Measurement of Product</b>	Date	04-03-2013
	Page 1 of 1	

(Ref Clause ISO 9001 - 8.2.4, ISO 14001 – N/a, OHSAS 18001 – N/a)

All the services offered by the Corporation are being monitored against various procedures and criteria listed in procedure manual of different departments.

The evidence of conformity with the acceptance criteria will be maintained and verified in the records of different departments. Records will indicate the personnel(s) authorizing release of services to the customer.

The services will be delivered only after the planned arrangements have been satisfactorily completed.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Control of Non-Conforming Services</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 3</b>	

(Ref Clause ISO 9001 - 8.3, ISO 14001 – 4.5.3, OHSAS 18001 – 4.5.3.1 & 4.5.3.2)

## 1.0 Purpose

This procedure is established, implemented and maintained to ensure that products/ services, which are not conforming to the specified requirements are identified and adequate correction actions taken.


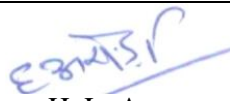
## 2.0 Scope

All activities and areas covered under ISO 9001 (QMS), ISO 14001 (EMS), OHSAS (18001) including the nonconformance relating to supplier/ subcontractor activities.

## 3.0 Responsibilities

MR and all concerned HOD's and Functional Head are responsible for implementation of this procedure.  
**(FOR ISO 9001 – QMS)**

<b>Activity</b>	<b>Responsibility</b>
Identify the Non conforming services/product for all services rendered by the department (as applicable).	Concerned executive to ensure
Update the THDCIL-CO-F-NCS-01, Non-conforming Service register, in consultation with HOD and nodal officer.	Do
Evaluate the nature and magnitude of Non conforming services/product and take necessary action as applicable: 1. Taking action to eliminate the detected non-conformity. 2. Accept with approval.	HOD in consultation with Nodal officer and other concerned officers
Take necessary correction action to close the non-conforming product/ service (if possible) for the identified non-conforming service and record in non-conforming services record.	Do
When a non-conforming service is corrected, it will be re-verified to demonstrate conformity to the requirements.	Concerned User
In case the non-conformity is detected after service has been delivered or put to use by the user, it is considered as a customer complaint and its redressal is done to avoid effects/potential effects as per process of handling of complaint as listed under sub-section 8.5.2 of this manual.	All concerned HODs to ensure


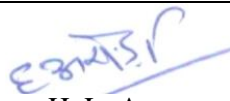
<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Control of Non Conforming Services</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 2 of 3</b>	

<b>Activity</b>	<b>Responsibility</b>
<b>For EMS &amp; OH&amp;SMS</b>	
In case of any non-compliance related to any legal or other requirements, to which THDCIL has subscribed, OR in case of any non-compliance in achieving key characteristics of activities having significant aspect/ occupational hazard, record the details of non-compliance in non-conforming service register THDCIL-CO-F-NCS-02.	All concerned HODs to ensure
Take the necessary action required to remove/mitigate any impact/risk caused in THDCIL-CO-F-NCS-02.	HOD in consultation with Nodal officer and other concerned officers
Investigate the non-conformity for determining the exact root cause and take necessary corrective action to avoid the recurrence of the same. Update record THDCIL-CO-F-NCS-02.	HOD in consultation with Nodal officer and other concerned officers
Communicate the necessary corrective actions decided to all concerned personnel/ departments, so that corrective action can be effectively implemented.	HOD of the concerned department to ensure
Identify the preventive action to prevent the potential non-conformity(ies) and implementing appropriate actions designed to avoid their occurrence. Update record THDCIL-CO-F-PA-02.	HOD in consultation with Nodal officer and other concerned officers
<b>Incident Identification (For OH&amp;SMS)</b>	
In case of any incident, while performing various activities, record the same in THDCIL-CO-F-NCS-02.	Concerned HOD to ensure
Investigation of incident shall be conducted (as per Procedure Manual of Safety department)	As per Procedure Manual of Safety Department
Determine the underlying OH&S deficiency and other factors that might be causing or contributing to the occurrence of incidents.	Do
Prepare the detailed report identifying clear root cause(s), correction action and corrective actions to be taken to avoid the recurrence of the incident.	Do
Identify the preventive action to prevent the non-conformity(ies) and implementing appropriate actions designed to avoid their occurrence.	Concerned HOD and other involved officers of various departments
Update the non-conforming services register THDCIL-CO-F-NCS-02.	Concerned HOD to ensure

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

## Management Manual

Section No.

8.3

Revision No.

00

## Control of Non Conforming Services

Date

04-03-2013

Page 3 of 3

### Criteria to ensure that process (Non-Conformity, Corrective and Preventive Action) is effective

Effectiveness of operation and control on process (non-conformity, corrective and preventive action) is reviewed through periodic internal audits by consultant / internal auditor. In addition to this MR/ Concerned HOD informally reviews that:

1. Non-Conformities are reduced.
2. Exact root causes are identified for detected non-conformities
3. Adequate correction action is taken and product meets the requirement to conformity.
4. Adequate mitigation action is taken to remove the environmental impact or occupational risks.
5. Adequate preventive actions are taken for identified potential non-conformities. (For EMS & OH&SMS)

Records will be kept for any non-conformity observed during any such informal reviews, in internal audit NCR format.

#### Records:

Form No.	Title	Location	Retention period	Disposal authority
THDCIL-CO-F-NCS-01	Non-Conforming Service/ Product (QMS)	Concerned HOD Office	3 yrs	Concerned HOD
THDCIL-CO-F-NCS-02	Non-Conforming Services (EMS & OH&SMS)	Concerned HOD Office	3 yrs	Concerned HOD

Prepared by

Manoj Sardana  
SM (QA – Civil & ISO) & Dy. MR

Reviewed by

H. L. Arora  
GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

## Management Manual

Section No.

8.4

Revision No.

00

## Analysis of Data

Date

04-03-2013

Page 1 of 1

(Ref Clause ISO 9001 - 8.4, ISO 14001- N/A, OHSAS 18001 – N/A)

THDCIL Corporate Office determines, collects and analyses appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made. This analysis of data includes data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data shall provide information relating to:

- a) Customer satisfaction,
- b) Conformity to product requirements,
- c) Characteristics and trends of processes and products including opportunities for preventive action, and
- d) Suppliers.

HODs are overall responsible for the analysis of data and initiation of appropriate continual improvement action.

Details of analysis conducted in department are included in procedure manual of respective departments.

### Reference:

**Various analysis of data**

*Prepared by*

Manoj Sardana  
SM (QA – Civil & ISO) & Dy. MR

*Reviewed by*

H. L. Arora  
GM (OMS, QA & Safety) & MR




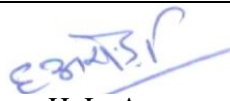
# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.5.1</b>
	<b>Revision No.</b>	<b>00</b>
<b>Continual Improvement</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	

(Ref Clause ISO 9001 - 8.5.1, ISO 14001– N/a, OHSAS 18001 – N/a)

## 8.5.1 Continual improvement

The Corporation is continually improving the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

<i>Prepared by</i>	<i>Reviewed by</i>
 Manoj Sardana SM (QA – Civil & ISO) & Dy. MR	 H. L. Arora GM (OMS, QA & Safety) & MR





# THDC India Limited, Corporate Office Rishikesh

## Management Manual

Section No.

8.5.2

Revision No.

00

## Corrective Action

Date

04-03-2013

Page 1 of 2

(Ref Clause ISO 9001 - 8.5.2, ISO 14001 – N/a, OHSAS 18001 – N/a)

### 1.0 Purpose

This procedure describes how the corrective actions are taken to avoid recurrence of non-conformities and customer complaints in THDC INDIA LIMITED, MR and respective HOD's of departments along with Director are responsible for implementation of this procedure.

### 2.0 Scope

To all identified non-conforming services.

### 3.0 Responsibilities

Concerned HODs along with nodal officers and concerned Functional Heads are responsible for analyzing and implementing corrective and preventive actions. Other responsibilities are as specified against each activity.

**(FOR ISO 9001 – QMS)**

#### **Procedure:**

Activity	Responsibility
Whenever any Non-Conforming Services is observed enter details in the relevant Non-Conformity Register, against the criteria defined in quality manual, procedure manual and other QMS documents.	Concerned executive
Investigate the causes of nonconformity & record the reason for nonconformity in the Nonconformity Register.	Concerned executive in consultation with Nodal officer and HOD
Take necessary corrective action to avoid the recurrence of non-conformity and record the action in the Nonconformity Register.	Concerned Executive
Prepare a summary of NCs and discuss in departmental Management review meeting.	Nodal Officer

Prepared by

Reviewed by

Manoj Sardana  
SM (QA – Civil & ISO) & Dy. MR

H. L. Arora  
GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.5.2</b>
	<b>Revision No.</b>	<b>00</b>
<b>Corrective Action</b>	<b>Date</b>	<b>04-03-2013</b>
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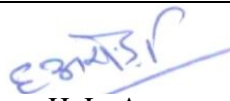
<b>Activity</b>	<b>Responsibility</b>
<b>Customer Complaint</b>	
Customer complaints related to intra departmental services, shall be dealt as per procedure defined procedure manuals of various departments.	Concerned HODs to ensure
In case of any customer complaint from beneficiaries, which is being received through Commercial department and shall be forwarded to concerned departmental HOD.	HOD Commercial Department
Discuss the problem within department and discuss the possible correction action with other departments and personnel (as required).	HOD in consultation with other concerned officers/ departments
Implement the correction action and inform the Commercial department and other concerned departments at Corporate Office.	Do
Analyse the complaint and determine the cause(s) of complaint.	Do
Take the necessary corrective action and maintain records of the same.	Concerned HOD to ensure
Record the customer complaint, root cause, correction action and corrective action for complaints received from beneficiaries in customer complaint register THDCIL-F-CO-CC-01.	HOD commercial department to ensure
Prepare a summary of complaints and discuss in Corporate level Management review meeting.	MR

### Criteria to ensure that process (Corrective Action) is effective

Effectiveness of operation and control on process (corrective action) is reviewed through periodic internal audits by internal auditor. In addition to this HOD/ nodal officer informally review that:

1. Non-Conformities are not repeated.
2. Repeated customer complaints are not received.
3. Corrective action implemented is effective.

Records will be kept for any non-conformity observed during any such informal reviews, in internal audit NCR format.

<i>Prepared by</i>	<i>Reviewed by</i>
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>8.5.3</b>
	<b>Revision No.</b>	<b>00</b>
<b>Preventive Action</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 2</b>	

(Ref Clause ISO 9001 - 8.5.2, ISO 14001– 4.5.3, OHSAS 18001 – 4.5.3.2)

## 1.0 Purpose

To establish a documented procedure to initiate preventive actions to eliminate causes of potential nonconformities. Preventive action taken is appropriate to the effects of the potential problems.

## 2.0 Scope

For all identified potential non-conformities.


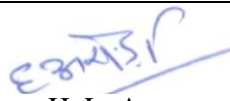
## 3.0 Responsibilities

Concerned HOD's along with nodal officer and concerned Functional Head are responsible for analyzing and implementing corrective and preventive actions. Other responsibilities are as specified against each activity.

**(FOR EMS & OH&SMS)**

### **Procedure:**

<b>Activity</b>	<b>Responsibility</b>
Review the non-conformities/ customer complaints/ internal audit NC's/ details from analysis of data/ Monitoring and Measurement results of EMS/OH&SMS impacts/risks/Evaluation of compliance to EMS/OH&SMS applicable legal and other requirements and identify the preventive action (if any) to prevent the potential non-conformity, record the action in Non-conforming service Register THDCIL-F-CO-PA-01.	Concerned HODs to ensure
Implement the preventive action to prevent potential non-conformities.	Concerned executive
Review the preventive action for effectiveness.	Nodal officer
Prepare the summary of preventive action, for discussion in departmental management review meeting.	Nodal officer

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	Section No.	8.5.3
	Revision No.	00
<b>Preventive Action</b>	Date	04-03-2013
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(FOR QMS)

## Procedure:

Activity	Responsibility
Identify the potential non-conformities and their causes.	Concerned HODs to ensure
Record the details in preventive action register THDCIL-CO-F-PA-01.	Do
Implement the preventive action to prevent potential non-conformities.	Concerned executive
Review the preventive action for effectiveness.	Nodal officer
Prepare the summary of preventive action, for discussion in departmental management review meeting.	Nodal officer

## Criteria to ensure that process (Preventive Action) is effective

Effectiveness of operation and control on process (preventive action) is reviewed through periodic internal audits by internal auditor. In addition to this concerned HODs informally review that:


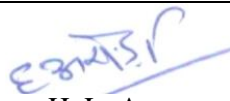
1. Potential non-conformities identified are analysed and exact root cause identified.
2. Preventive action implemented in time.
3. Preventive action implemented is effective.

## Reference:

**Non-Conforming Service Register**  
**Various analysis of data**

## Records:

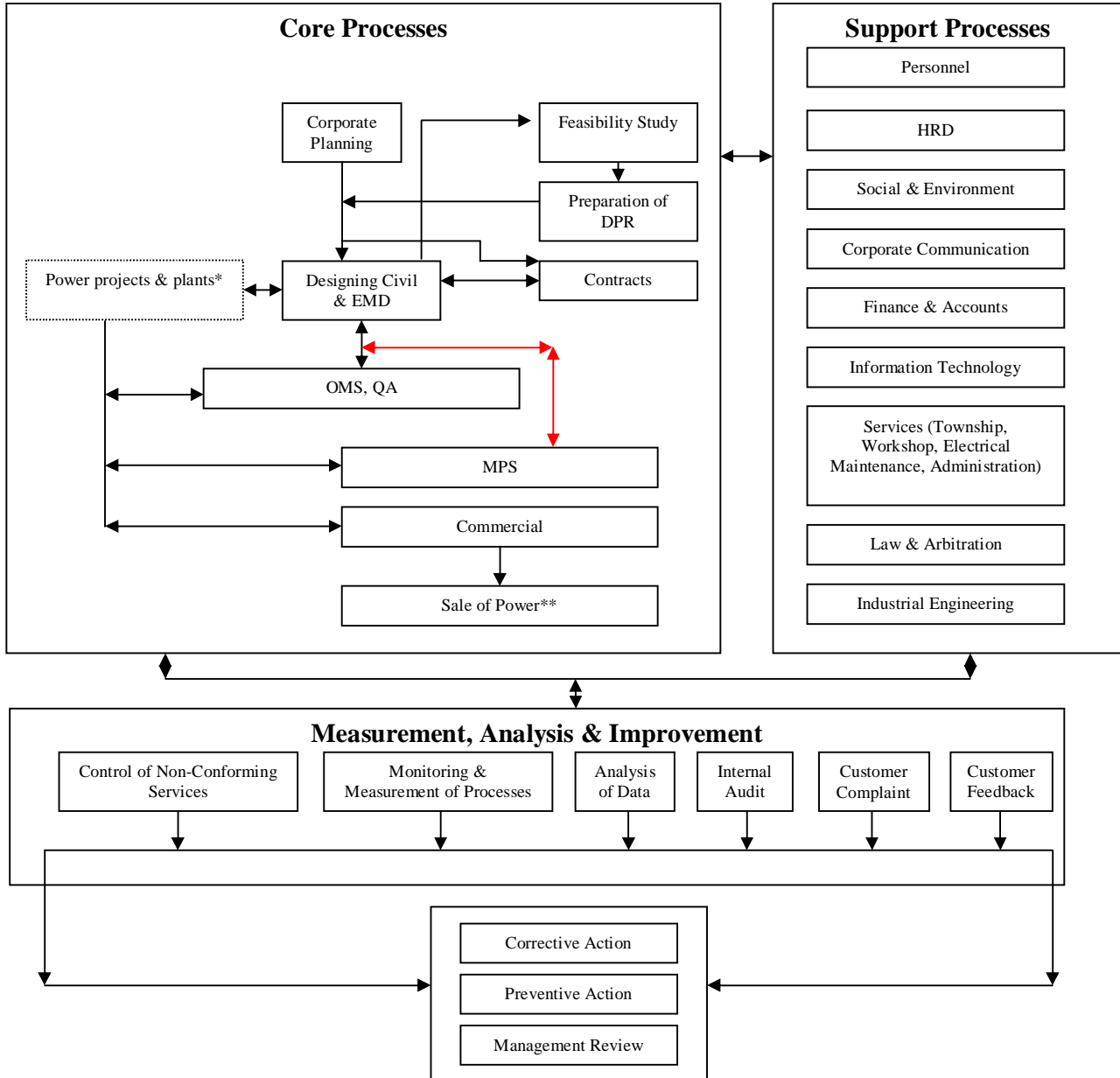
Form No.	Title	Location	Retention period	Disposal authority
THDCIL-CO-F-PA-01	Preventive Action Register	MR Office	3 yrs	Concerned HOD

Prepared by	Reviewed by
 Manoj Sardana SM (QA – Civil & ISO) & Dy. MR	 H. L. Arora GM (OMS, QA & Safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>9.1</b>
	<b>Revision No. - 00</b>	<b>Annexure A</b>
<b>QMS - Processes &amp; Their Interaction</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 1</b>	


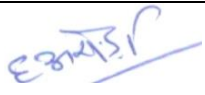


Note:\* First level of Customer

\* Power projects and plants, also interact with various supporting departments as listed on need basis.

\*\* Sale of power to beneficiaries (Second level of customer).

Analysis of data and control of documents & records will be carried out at all departments/offices.

<i>Prepared by</i>	<i>Reviewed by</i>
 <b>Manoj Sardana</b> SM (QA – Civil & ISO) & Dy. MR	 <b>H. L. Arora</b> GM (OMS, QA & safety) & MR



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
	<b>Revision No. - 00</b>	<b>Annexure B</b>
<b>Quality Objectives (Corporate Level)</b>	<b>Date</b>	04-03-2013
	<b>Page 1 of 6</b>	

## QUALITY OBJECTIVES FOR YEAR 2013-14

(The targets mentioned are w.r.t. 'Excellent' performance rating)

### A. Sector Specific Parameters

#### 1. Availability Factor (NAPAF)

i) Tehri HPP (1000 MW)

**Target: 82 %**

ii) Koteshwar HPP (400 MW)

**Target: 67 %**

#### 2. Power Generation Targets

i) Tehri HPP (1000 MW)

**Target: 2937 MU**

ii) Koteshwar HPP (400 MW)

**Target: 1213 MU**

Combined Generation

**Target: 4150 MU**

#### 3. Collection Efficiency

**Target: 92%**

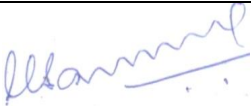
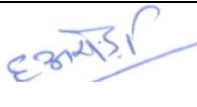
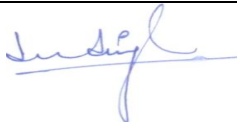

#### 4. ISO Certification:

i) To acquire ISO 9001:2008 (QMS) & ISO 14001:2004 (EMS) for KHEP, Koteshwar.

**Target: 31.12.2013**

ii) To acquire ISO 14001:2004(EMS) & OHSAS 18001:2007 at Corporate Office Rishikesh.

**Target: 31.12.2013**

<i>Prepared by</i>		<i>Reviewed by</i>	<i>Approved by</i>
			
(Manoj Sardana) Dy. Management Representative	(H. L. Arora) Management Representative	(D. V. Singh) Director (Technical)	(R. S. T. Sai) Chairman & Managing Director



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
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## B) Enterprise Specific Parameters:

i) Third Party Dam Safety Inspection of Power Station under operation (Tehri HPP 1000 MW)

**Target: 31.12. 2013**

ii) Third Party Dam Safety Inspection of Power Station under operation (Koteshwar HEP 400 MW)

**Target: 31.12. 2013**

iii) Reconciliation of debtors and advances balances as on 31.03.2013.

**Target: 31.11.2013**

iv) Order Booking / Income from Consultancy assignments

**Target: ` 6.0 Cr.**

## C. Financial Targets.

i) Gross Sales:

**Target: ` 2026.0 Cr.**

ii) Gross Margin:

**Target: ` 1640.10 Cr.**

## D. Dynamic Parameters:

### 1. Project Implementation:


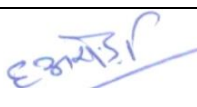
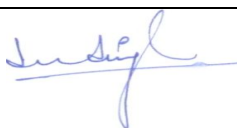

a) Tehri PSP (1000 MW)

i) Complete Crown slashing of Penstock Assembly Chamber (PAC) up to EL 719 M

**Target: Nov.'13**

ii) Complete Crown slashing of Butterfly Valve Chamber (BVC) up to EL 724 M.

**Target: Nov.'13**


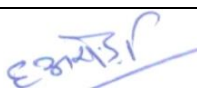
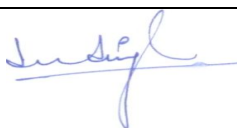

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 (Manoj Sardana) Dy. Management Representative	 (H. L. Arora) Management Representative	 (D. V. Singh) Director (Technical)	 (R. S. T. Sai) Chairman & Managing Director



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
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- iii) Completion of excavation of lower Penstock chamber  
**Target: August'13**
- iv) Crown slashing & bench excavation of M/C hall up to crane beam level EL. 592 M  
**Target: Nov.'13**
- v) Completion of excavation of Upper drainage gallery around M/C hall.  
**Target: Nov.'13**
- vi) Complete Excavation of Bus Bar chamber.  
**Target: June'13**
- vii) Completion of Excavation of drainage gallery around BVC.  
**Target: July'13**
- viii) Completion Of Pilot Shaft Of Downstream Surge Shaft In Trt-4.  
**Target: Dec.'13**
- ix) Completion of Pilot shaft of downstream Surge Shaft in TRT-3  
**Target: Dec.'13**
- x) Heading Excavation of TRT-3 up to 500 M length.  
**Target: Dec.'13**
- xi) Heading Excavation of TRT-4 up to 400 M length.  
**Target: Dec.'13**
- xii) Completion of excavation of access Adit AA-1 to top of U/S Surge Shaft  
**Target: August'13**

<i>Prepared by</i>		<i>Reviewed by</i>	<i>Approved by</i>
			
(Manoj Sardana) Dy. Management Representative	(H. L. Arora) Management Representative	(D. V. Singh) Director (Technical)	(R. S. T. Sai) Chairman & Managing Director





# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
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<b>Quality Objectives (Corporate Level)</b>	<b>Date</b>	04-03-2013
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b) Vishnugad Pipalkoti HEP (444 MW)

- i) Completion of earth-matting & supply of equipments for 66/33/11 kV Sub-station at Power House site.

**Target: June'13**

c) Dhukwan SHP (24 MW)

- i) Invitation of bids for Main works-Civil

**Target: June'13**

## 2. Human Resource Management:

- i) % actualisation of Training Plan & Training Days per employee per year (Planned 6000 Man days Training; average 2.80 days per employee).

**Target: 95%**

- ii) Carrying out Competency mapping of employees

**Target: 210 Nos.**

- iii) Certificate course for Executives in:

a) Project Management.

**Target: 17 Nos.**

b) Legal Aspects of Contract Management.


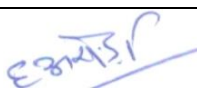
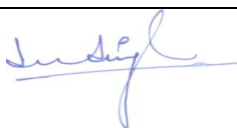

**Target: 17 Nos.**

- iv) Number of Quality Circle Projects completed against total Quality circle projects undertaken in a year projects.

**Target: 04 Nos.**

- v) Conduction of HR Audit at Corporate Office and Tehri.

**Target: October 2013**

<i>Prepared by</i>		<i>Reviewed by</i>	<i>Approved by</i>
			
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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
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### 3. Corporate Social Responsibility

I (i) a) No. of seminars / workshop / training sessions organised to sensitize the employees and changing their mind set / orientation.

**Target: 06 Nos.**

b) The presence of the top management / executives in such meetings / seminars / Course

**Target: 03 Nos.**

c) Total no. of employees covered through such initiatives, indicating their levels / grades.

**Target: 210 Nos.**

I(ii) a) Plantation of saplings

**Target: 12000 Nos.**

b) Modernisation of 'PANCHAKKI' for Energy Conservation, in Uttarakhand

**Target: 05 Nos.**

II a) Formulation of a corporate communication strategy.

**Target: Aug.'13**

b) The level of executives' involvement in the implementation of the communication Strategy.

**Target: E-4 Level**

c) No. of meetings / consultations held with the key stakeholders


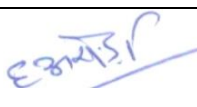
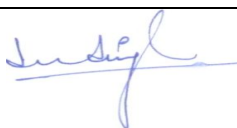

**Target: 11 Nos.**

d) Establishment of feedback channels from key stake holders regarding the performance of the company in Social, Economical and Environmental Sustainability

**Target: Aug.'13**

III Publication of Sustainability report and display on the company's website

**Target: Feb.'14**

<i>Prepared by</i>		<i>Reviewed by</i>	<i>Approved by</i>
			
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## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	9.2
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<b>Quality Objectives (Corporate Level)</b>	<b>Date</b>	04-03-2013
	<b>Page 6 of 6</b>	

IV a) Construction of Academic Block for 3<sup>rd</sup> year in THDC Institute of Hydropower Engineering & Technology at Tehri

**Target: Aug.'13**

b) Base line survey for need assessment in 20 villages in Tehri District.

**Target: Dec.'13**

c) Establishment of new Women Empowerment Centre including Market linkage.

**Target: 05 Nos.**

d) Medical Camps in villages

**Target: 11 Nos.**

V Expenditure incurred on CSR and Sustainability activities (1.5% of PAT of 2012-2013)

**Target: 1.75%**

VI a) Existence of two-tier organisational structure with mandatory membership of an Independent Director on the Board level committee.

**Target: May'13**

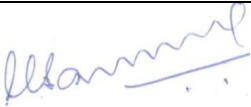
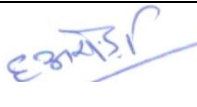
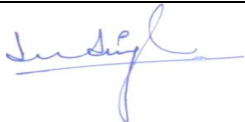

b) Frequency of meeting held by the Board Level Committee and by the Group of Officers headed by the Nodal Officer.

**Target: 04 Nos.**

c) Number of Projects monitored by the two-tier structures in Planning and Monitoring of CSR Activities.

**Target: 03 Nos.**

VII To increase satisfaction level amongst employees and provide them quality services by Services & Administration department by reducing 3% customer complaints every calendar year.

<i>Prepared by</i>		<i>Reviewed by</i>	<i>Approved by</i>
			
(Manoj Sardana) Dy. Management Representative	(H. L. Arora) Management Representative	(D. V. Singh) Director (Technical)	(R. S. T. Sai) Chairman & Managing Director



# THDC India Limited, Corporate Office, Rishikesh

## Management Manual

Section No.

9.3

Revision No. - 00

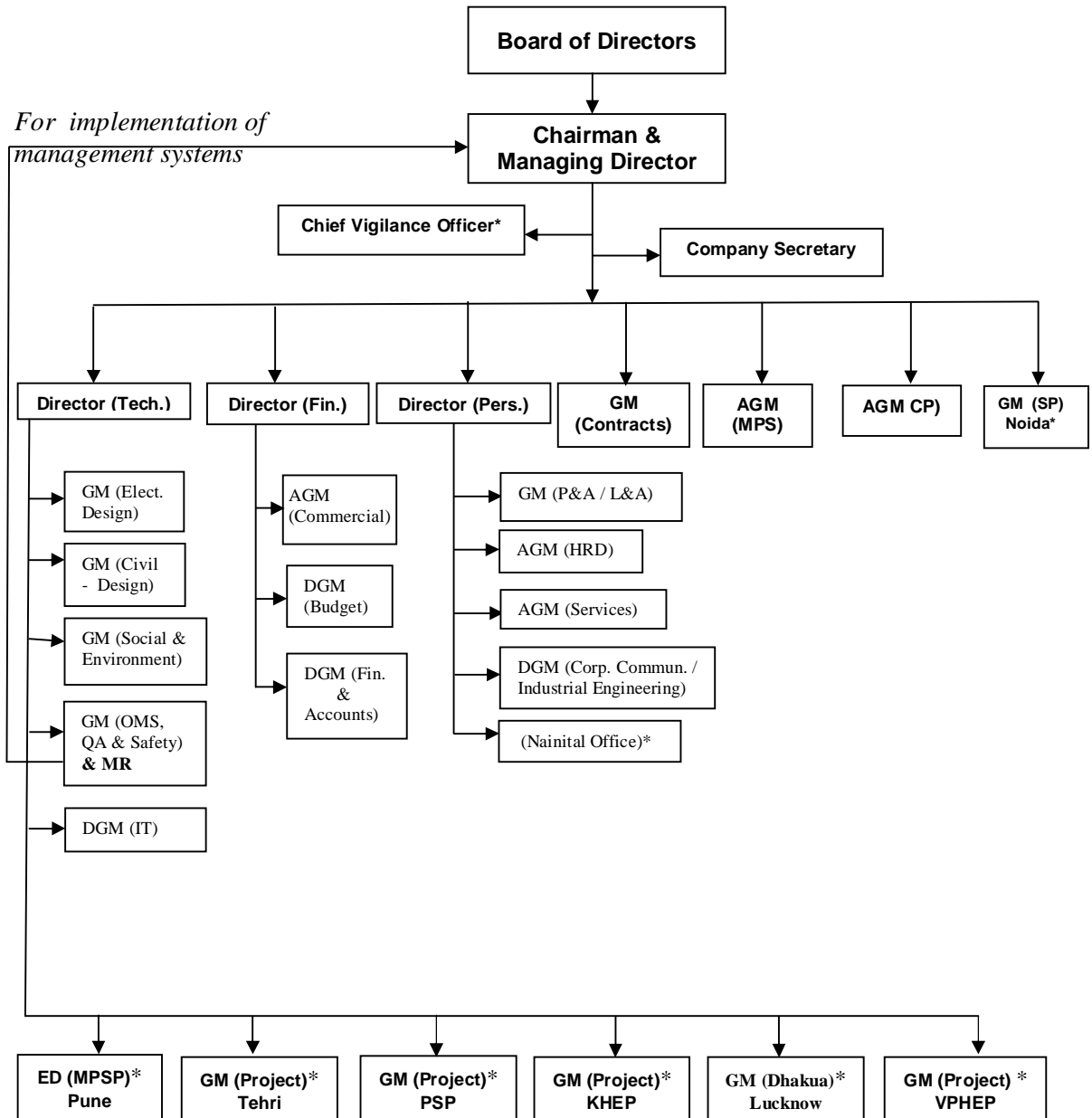
Annexure C

## Organization Chart

Date

04-03-2013

Page 1 of 1



\* Note: Not included in the scope of Management Systems.

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(H. L. Arora)

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THDC India Limited



# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>9.4</b>
	<b>Revision No. – 00</b>	<b>Annexure D</b>
<b>(Responsibilities of CMD, Directors and Company Secretary)</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 1 of 3</b>	

## **Responsibilities of CMD, Directors & Company Secretary**

### **Chairman & Managing Director**

The Chairman and Managing Director is the Chief Executive of the Corporation and accountable to Board of Directors and the Government. He is responsible for efficient functioning of the Corporation for achieving its Corporate objectives and performance parameters. He is responsible for overall planning, operation, management, and control of the multi-disciplinary operations of the Corporation, furthering its interests and to oversee physical and financial performance of the Corporation. He is also responsible for establishing and approving quality policy and quality objectives of the Corporation.

He is responsible for developing business strategies that reflect the long term corporate objectives and provide corporate leadership with strong conviction and clear strategic vision to ensure good corporate governance practice within the corporation. He is also responsible for bringing more transparency and accountability in the functioning of corporation

He is also responsible for efficient vigilant administration and coordination among Directors.

### **Director (Personnel)**

Director ((Personnel) is a member of Board of Directors and reports to the Chairman and Managing Director. The Director (Personnel) is responsible for formulation and execution of policies relating to human resources management in the Corporation. He heads the personnel and administrative activities in the company and is responsible for manpower planning and development He will ensure synthesizing and synergizing of the personnel policies, practices of various constituents of of the Corporation enabling evolution of appropriate work culture, administration and development of human resources of the Corporation. He is responsible for overseeing activities related to Legal & Arbitration matters of the Corporation. He is also responsible for maintaining harmonious industrial relations. He is also responsible for effective and efficient utilization of human resources for achieving corporate growth.

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THDC India Limited



## THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>9.4</b>
	<b>Revision No. – 00</b>	<b>Annexure D</b>
<b>(Responsibilities of CMD, Directors and Company Secretary)</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 2 of 3</b>	

### **Director (Technical)**

Director (Technical) is a member of Board of Directors and reports to the Chairman and Managing Director. He acts as Head of the Technical/Operations Division of the Company. His principal responsibility is to exercise control over the efficient operation of the plants of the Company in a manner which would ensure optimum utilization of resources. He also acts as Principal Adviser of the Company in all Technical and Operational matters.

The Director (Technical) is responsible for overall planning, design & engineering, quality & execution of projects, management, operation, and control of all technical matters relating to Corporation's strategies and policies for development of hydro projects / other conventional and non conventional projects entrusted by Government of India / State Govt.(s). He is also responsible for laying down operations philosophy of the Corporation for operating projects with a view to maximise generation as well as availability of generating machines consistent with Corporation's objectives. He is also responsible for overseeing activities related to Information Technology in the Corporation.

### **Director (Finance)**

Director (Finance) is a member on the Board of Directors and reports to Chairman and Managing Director. He is overall In charge of Finance and Accounts function of the Corporation. In addition to Finance & Accounts Function, Director (Finance) holds the functional charge of Internal Audit, Legal, Secretarial, Administration and Estate Departments of the Corporation.

He is also responsible for formulation and implementation of sound financial policies. In particular, he is entrusted with the responsibilities of integrating Corporation's financial operations and optimising the investments of the Corporation, financial planning, corporate taxation, management accounting and auditing. He is also responsible for overseeing Commercial activities of the Corporation.

(Manoj Sardana)

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# THDC India Limited, Corporate Office Rishikesh

<b>Management Manual</b>	<b>Section No.</b>	<b>9.4</b>
	<b>Revision No. – 00</b>	<b>Annexure D</b>
<b>(Responsibilities of CMD, Directors and Company Secretary)</b>	<b>Date</b>	<b>04-03-2013</b>
	<b>Page 3 of 3</b>	

## Company Secretary

The Company Secretary is the Principal Officer of the Corporation. He is the link between the Board of Directors and Company. He is responsible for implementing Corporate Governance Guidelines and other Guidelines issued from DPE and other appropriate authority from time to time. He has statutory responsibility as 'Officer in Default' as per the Companies Act, 1956. The Company Secretary is inter-alia responsible for:

- Convening Board Meetings, Meetings of the Board Sub-committees including Audit Committee Meetings, Remuneration Committee Meetings and General Body Meetings of the members and to ensure that these meetings transect the business in strict conformity with applicable laws.
- Recording and maintaining approved Minutes of Board Meetings, Audit Committee Meetings and other Board Sub-Committee Meetings and Annual General Meetings and convey resolutions / decisions taken to the concerned departments.
- To monitor the implementation of the decisions taken by the Board, Sub-Committee of Board and Share Holders.
- Submission of Action Taken Report to Board and Sub-Committees of Board
- Maintaining statutory records, registers required to be maintained as per Companies Act, 1956.
- Preparation and filing of Annual Return, Balance Sheet, various statutory Returns, reports and forms with Registrar of Companies and other Statutory Bodies as per the provisions of Companies Act, 1956.
- Review and updating of Memorandum of Association, Articles of Association and Delegation of Powers and related policies for smooth functioning of the Company.
- Rendering advice to Chairman, Board and Sub-Committees of Board on all matters relating to Corporate Laws, Corporate Governance and Legal provisions under other applicable acts, and other Corporate related issues.
- Issue of Equity Capital / Debentures / Deposits and connected matters.
- Dealing with Company Affairs, SEBI, Stock Exchanges, all Stake Holders and other Government Agencies etc.
- Submission of Disclosures by Board members
- Ensuring Compliance to Corporate Governance Guidelines as applicable to the corporation .
- All other matters as assigned by Board, Sub -Committee of Board and CMD from time to time.

\*\*\*\*\*

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THDC India Limited

# EMS – Interactions of ISO14001:2004 Elements, Annexure E, Section 9.5,

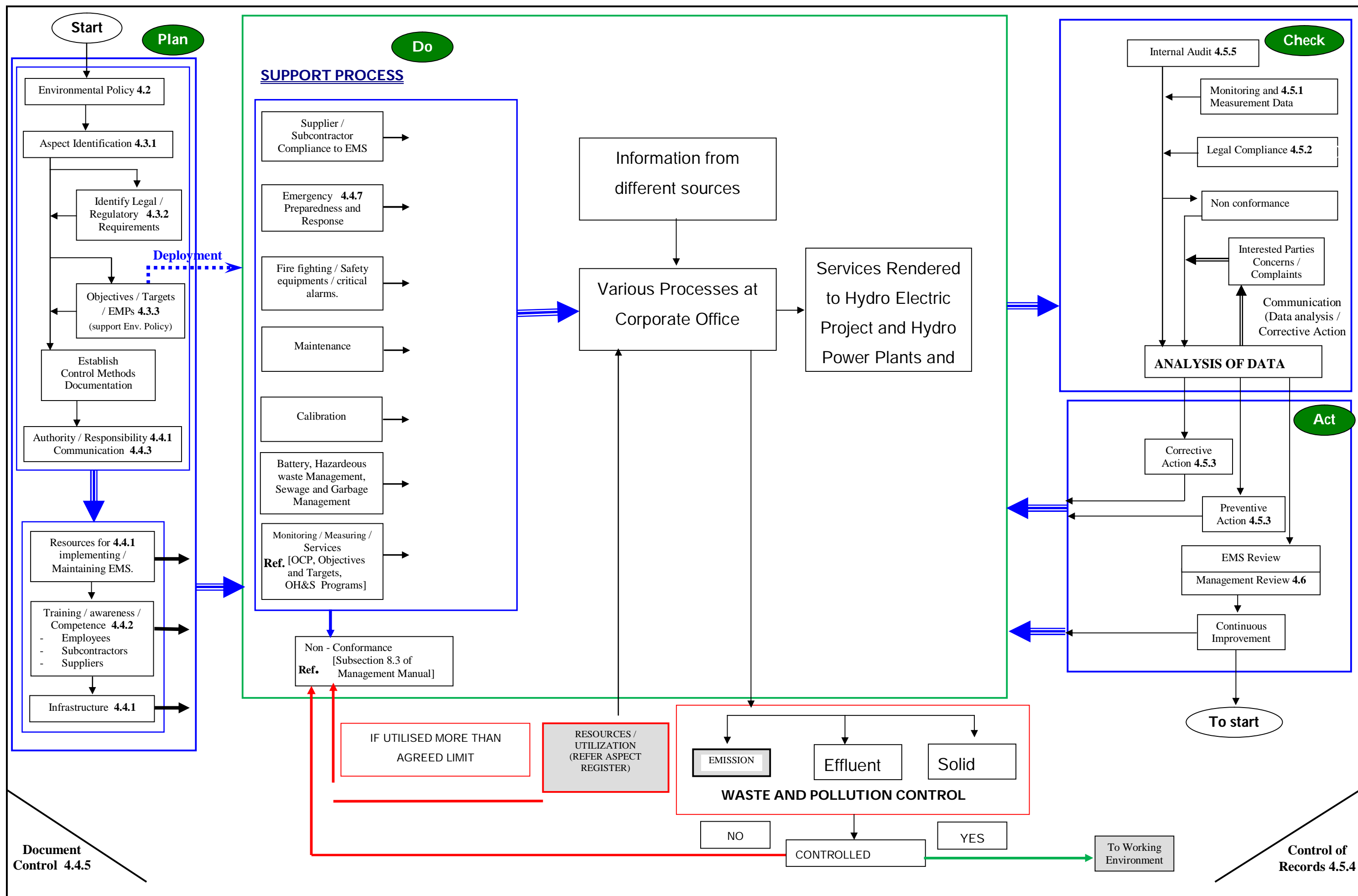
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EMS Requirements & Planning  
4.3

Implementation and Control (Operational Control) 4.4.6

Checking and Corrective Action





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## THDC India Limited, Corporate Office Rishikesh

### Process Approach & PDCA Cycle

Section No.

9.5A

Revision No. - 00

Annexure E-1

Date

04-03-2013

Page 1 of 1

The Process approach of ISO 9001, ISO 14001 and OHSAS 18001 is based on the methodology of Plan-Do-Check-Act (PDCA).

PDCA can be briefly described as follows:

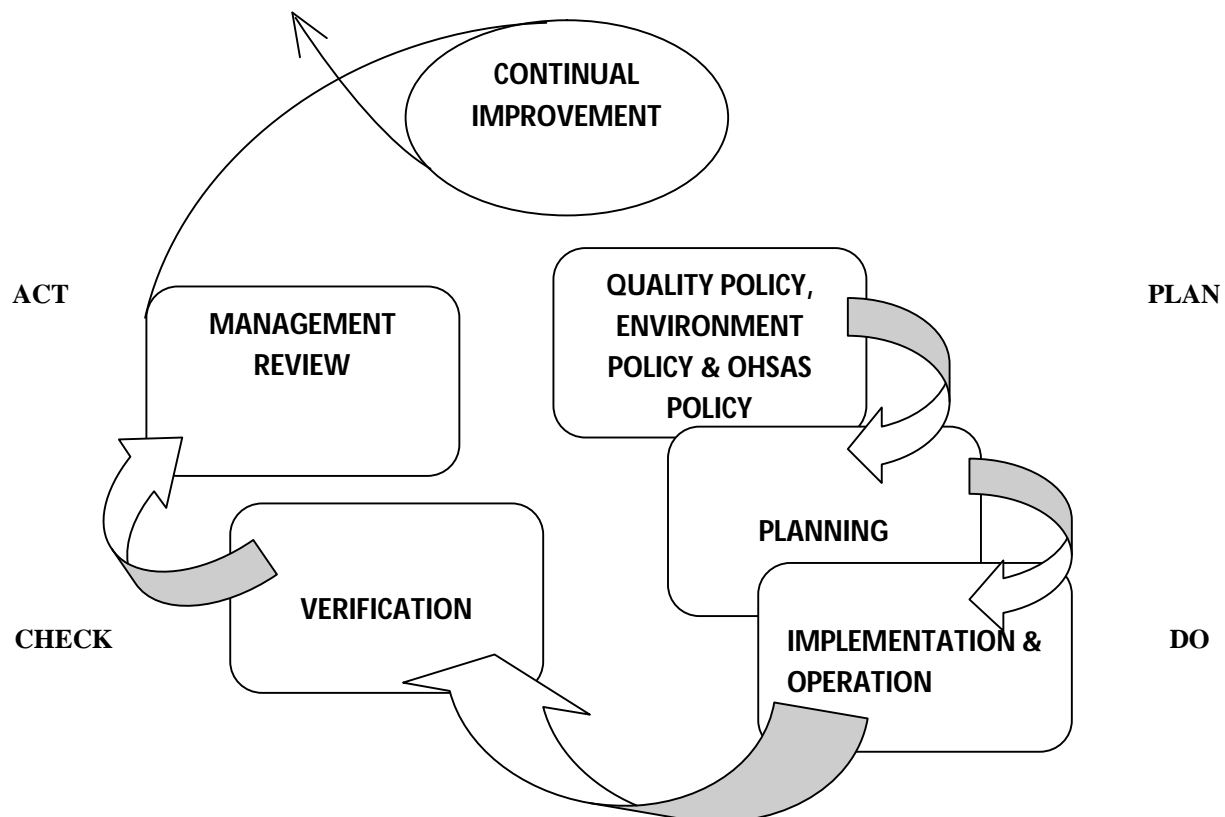
**Plan:** Establish the objectives and processes necessary to deliver results in accordance with the organization's Quality, Environment and OHSAS policies.

**Do:** Implement the processes.

**Check:** Monitor and measure processes against environmental policy, objectives, targets, legal and other requirements, and report the results.

**Act:** Take actions to continually improve performance of the environmental management system.

### PROCESS FLOW CHART OF PDCA CYCLE LEADING TO CONTINUAL IMPROVEMENT



Prepared by

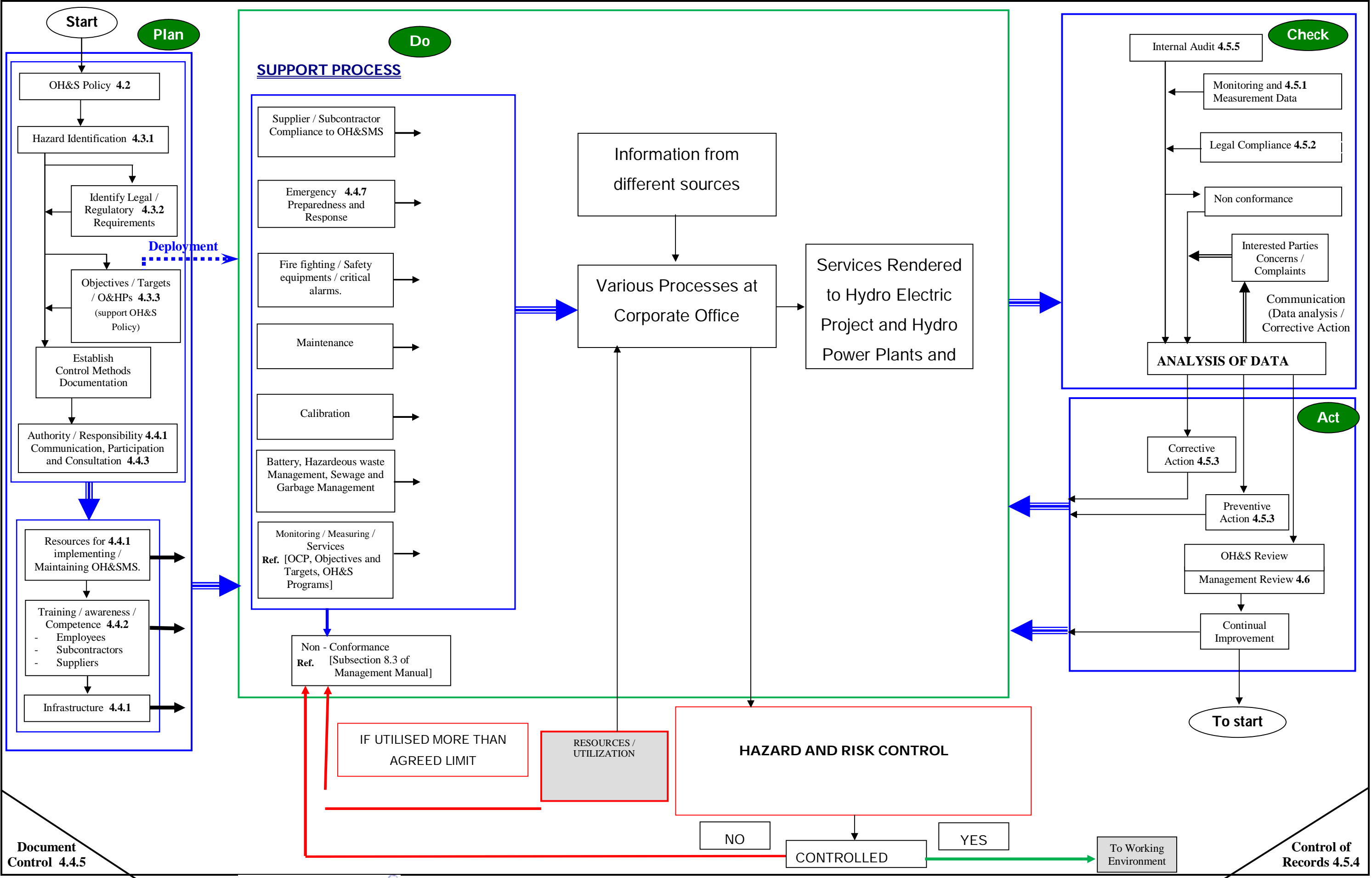
SM (QA - Civil & ISO) & Dy. MR

Reviewed by

GM (OMS, QA & Safety) & MR

**OH&S – Interactions of OHSAS18001:2007 Elements, Annexure F, Section**

**9.6, Rev-00, Dt -04-03-2013**



Document Control 4.4.5

Control of Records 4.5.4

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