



**HEALTH, SAFETY &  
ENVIRONMENTAL  
MANAGEMENT SYSTEM  
MANUAL**

**HSEMSM**

Effective Date: **18.06.2009**

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Approved by:

Chairman



**Abu Dhabi Water and Electricity Authority  
“ADWEA”**

**HEALTH, SAFETY & ENVIRONMENTAL  
MANAGEMENT SYSTEM MANUAL**

**Written by:**

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HSE SPECIALIST

**Date:**

**Reviewed by:**

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**Date:**

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PLANNING & DEVELOPMENT  
DIRECTOR

**Date:**

**Approved by:**

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CHAIRMAN

**Date:**

**Effective Date:**

### Amendment Sheet

VERSION	PAGE NUMBER	DESCRIPTION OF CHANGE	APPROVED BY	EFFECTIVE DATE
1		This HSEMS manual Revised in line with ISO 14001: 2004 and OHSAS 18001: 2007 Standards.		
1	1	HSE Advisor changed to HSE Specialist		
1	5	Section 1 "introduction" revised		
1	8	Clause 1.2 " HSE Policy" modified		
1	12	Section1.8 "Terminology" all definitions subjected to review, update and new definitions added.		
1	13,14,15,16	Clouse 1.5 " Roles and Responsibilities" added new		
1	35	Clause 4.5.2 " Accidents , incidents , non-conformance and corrective and preventive action " split into two clauses : 4.5.3.1" incident investigation" 4.5.3.2 "nonconformity , corrective action and preventive action"		
1	35	clause 4.5.3 "Records and records management" change to clause 4.5.4 "Control of records"		
1	35	clause 4.4.1 "Structure and Responsibilities" change to "Resources ,Roles ,Responsibilities ,Accountability and Authority"		
1	35	Clause 4.4.2 change from "Training, awareness and competence" to "Competence ,training and awareness" as		
1	35	Clause 4.3.1 change from " planning for hazard identification ,risk assessment and risk control" to " hazard identification , risk assessment and determining controls"		
1	35	Clause 4.4.5 change from "Document and Data Control " to "Control of documents"		





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## 1 INTRODUCTION

In 1966, the Government of Abu Dhabi established the Water & Electricity Department to provide safe and reliable supplies of water and electricity for delivery to consumers in order to promote the social and economic development of the Emirate of Abu Dhabi.

By 1996, the Water & Electricity Department had grown to an installed capacity of nearly 3000MW and 200 million gallons of desalinated water per day. In addition, the Water & Electricity Department carried a multinational compliment of technical and support staff of more than 15,000 employees.

In early 1996, the Privatisation Committee for the Water & Electricity Sector (PCWES) was formed. The Privatisation Committee's activities involved the extensive use of consultants to prepare recommendations for the restructuring of the existing sector, formulate plans for the implementation of the privatisation activities, and recommend legislation to accomplish the legal aspects for the privatisation of the sector.

Following nearly two years of effort by the Privatisation Committee, the Government of the Emirate of Abu Dhabi approved Law No. 2 of 1998, establishing the Abu Dhabi Water & Electricity Authority (ADWEA). By virtue of an Emiri Decree issued, at the same time, the Board of Management of ADWEA was formed under the Chairmanship of H.H. Sheikh Diab bin Zayed Al Nahyan.

In March 1998, the Government of Abu Dhabi approved the Law No. 2 of 1998 establishing Abu Dhabi Water and Electricity Authority (ADWEA), under the oversight of the ADWEA Board of Management. The principal goal and objective of ADWEA is the privatisation of the Water & Electricity Industry in Abu Dhabi.

ADWEA is the ultimate authority directing the development, transmission and distribution of Power and Water in the Emirate of Abu Dhabi.

- ADWEA primary customer is the Emirate of Abu Dhabi and its municipalities providing its services to ADWEA Group of Companies.

- This Manual serves as a HSE Management System Manual and describes the organisation the means and methods used for the HSE Management System applied within ADWEA to ensure the Health & Safety of personnel, as well as, to protect the Environment. The HSE Management Manual is established in conformity to the ISO 14001:2004 & OHSAS 18001:2007 Standard requirements and revised to meet new requirement of ABU DHABI Emirate EHSMS Manual and very reliable to comply with any new future laws or legislations



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and their relevant documentations. This means that the observance of the requirements of this Manual ensures conformity with these standards/legislations.

●Based on the strategic plan, ADWEA set out the new development to be done in the Emirate of Abu Dhabi. Although, generally, the design activities are subcontracted to competent and qualified consultants; ADWEA through the Project Directorate controls all development and construction activities.

●This HSE Management System Manual is mainly intended for internal use, and is ADWEA's property.

ADWEA is a Public Organisation whose professional staff is engaged in management services.

ADWEA determines all matters relating to the formulation development and implementation of the policy of the Government in relation to the water and electricity sector, including all matters relating to the privatisation of the water and electricity sector.

In relation to Independent Water and Electricity Generation Projects, ADWEA:

●May enter into binding commitment with private sector entities regarding funding of public sector participation in such projects;

●Shall lease, or procure the lease of, land owned by the government required for the implementation of such projects and rights related to the use of such land; and

●Shall provide assistance in the procurement of consents and permits required for the implementation of such projects and liaise with other government authorities in connection therewith.

ADWEA sets out to provide economic value for its customers by helping them manage their assets, projects, products and systems related to quality, health, safety, performance and environment.



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## **1.1 MESSAGE FROM THE CHAIRMAN**

### **ADWEA'S MISSION**

Our mission is to Generate, Transmit and Distribute Potable Water and Electricity, in a Reliable, Secure, Safe, and Cost Effective manner for the Emirate of Abu Dhabi while ensuring the Protection of the Environment. We aim for the continual improvement in our Health, Safety & Environmental performance while complying with the Local, Federal, and International Regulations.

To support this mission, ADWEA has defined the core elements of it's HSEMS and the processes required to meet the Objectives of these elements. The HSEMS elements define ADWEA management's approach towards managing the Health, Safety & Environmental aspects of its activities, products & services.

The HSEMS has been established to not only comply but also exceed the requirements of international standards such as ISO 14001 & OHSAS 18001 and to ensure its continuous suitability, effectiveness & improvement.

As ADWEA Chairman, I am personally committed to achieve our mission. Therefore, every member of ADWEA is required to work toward that aim. Together we will achieve our objectives.

## 1.2 HSE POLICY

The Policy of Abu Dhabi Water and Electricity Authority (ADWEA) and its Companies, in carrying out all its activities, is to pursue a sound Health, Safety and Environmental System and Program in order to protect the safety and health of employees, contractors, customers and the community at large. To minimize the impact to environment in compliance with the Federal and Local Legislation concerning HSE and the applicable international rules and standards.

ADWEA and its Group Companies believe that good HSE performance will contribute and determine the success of the business and that HSE is a shared responsibility across ADWEA and its Companies, particularly line Managers and Supervisors.

ADWEA and its Group of Companies will:

- Set HSE standards that ensure commitment of compliance to all relevant regulatory and legislative requirements (e.g. ABU DHABI EHS law ); and other requirement which ADWEA subscribes that relates to HSE
- Develop systems and procedures aimed at reducing HSE risks, and systematically audit work practices and identify potential HSE hazards with the commitment of prevention injury and ill health.
- Identify clearly the roles; responsibilities and accountabilities of ADWEA as a (Sector Regulating Authority) and the ADWEA affiliated companies as a (targeted entities) and their responsibilities in front of Competent Authorities / Regulation parties.
- Be committed to continual Improvement in HSE management and performance through regular self-assessment and performance measurement/targeting; Design / Modify the facilities in a manner to reduce all HSE risks to acceptable level;
  - Progressively reduce the environmental and health impacts of its operations by reducing emissions, effluents/discharges and wastes and improve efficient use of natural resources and energy;
  - Demonstrate and promote pollution prevention, environmental preparedness and waste minimization;
  - Ensure high quality products that can be cost effective and used safely by our customers;
  - Pursue innovative activities, products, research and investments that provide a healthy, accident-free workplace and a sustainable, quality environment for future generations;
  - Integrate and enhance HSE considerations into all business processes;
  - Inform and encourage employees in their duty to act responsibly and to take all precautions necessary, not only to protect themselves but also others, from injury, occupational illness and environmental damage that could arise from their actions;



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- Ensure that all employees receive adequate and suitable training to enable them to understand and perform their role to achieve superior HSE performance; and
- Ensure that where contractors are employed, their commitment to HSE is of an equal standard to that set by ADWEA and its Companies and to ensure the availability of these standards to all interested parties.

To this end, all personnel are responsible for understanding the HSE impacts, hazards and risks associated with their jobs and for following the proper procedures to minimize or eliminate those impacts, hazards and risks. All employees and contractors are required to perform their duties having in mind that individual responsibility for HSE cannot be delegated.

**DIAB BIN ZAYED AL NAHYAN**

**ADWEA CHAIRMAN**

### 1.3 HSE OBJECTIVES

Within the framework of ADWEA's strategic plan, the Chairman in consultation with the Directors and the HSE Management Representative prepares ADWEA HSE Objectives consistent with the ADWEA Mission and HSE Policy.

In relation with these objectives, ADWEA Group Companies have prepared their own objectives to be achieved. The objectives are communicated at all levels of the organisations within ADWEA and the Group Companies.

### 1.4 SCOPE

ADWEA develops and implements the policy of the Government in relation to the water and electricity sector, including all matters relating to the privatisation of the water and electricity sector. This Manual is applicable to all activities carried out by ADWEA.

### 1.5 ROLES AND RESPONSABILITIES

#### 1.5.1 ROLES AND RESPONSIBILITIES OF ADWEA AS SECTOR REGULATING AUTHORITY (SRA) :

- Identifying entities that are required to develop and implement an HSEMS;
- Encouraging and helping the targeted entities in developing and implementing their HSEMS;
- Revision and approval of the HSEMS developed by the targeted entities.
- Monitoring implementation of the HSEMS system through periodical inspection of entities;
- Auditing the HSEMS implemented by the targeted entities , if the need arises; and
- Collecting specified Key Performance Indicators.
- Updating power Sector guidelines , when necessary;
- Producing Technical Guidelines and information Bulletins; and
- Reporting to the Competent Authority on the performance of the EHSMS at the sector level (power sector).

### **1.5.2 ROLES AND RESPONSIBILITIES OF THE TARGETED ENTITIES ( ADWEA AFFILIATED COMPANIES AND OTHER POWER SECTOR BODIES)**

- HSEMS registration and regular reporting requirements to Sector Regulatory Authority (ADWEA)
- Under going annual third party external audits;
- Submitting annual reports to sector Regulatory Authority;
- Reporting HSE incidents to the relevant authorities , including the Sector Regulating Authority

### **1.6 UPDATING OF THIS MANUAL**

- This Manual shall be updated according to the procedure for Document Control, as and whenever required.
- When a change is made, the affected text is underlined. The reason for the change, date, and authorisation is contained in the change history sheet.

### **1.7 IMPLEMENTATION**

To ensure that the Policy and Objectives for HSE are understood and maintained at all levels within ADWEA; the following measures will be followed:

- All existing and new employees will undergo induction into the HSE Policy and Objectives statement and the requirements of the HSE Management System documents.
- Internal HSE Audits will be routinely conducted to ensure staff adherence to the documented HSE Management System requirements.
- The HSE Policy Statement is visually displayed.

## 1.8 TERMINOLOGY

This chapter defines terms used in this Manual, insofar as they're meaning differ from common usage.

<b><u>Acceptable risk</u></b>	<u>Risk that has been reduced to a level that can be tolerated by the organization having regard to its legal obligations and its own HSE policy.</u>
<b><u>Audit</u></b>	<u>Systematic, independent and documented process for obtaining "audit evidence" and evaluating it objectively to determine the extent to which "audit criteria" are fulfilled.</u>
<b><u>Continual improvement</u></b>	<u>Recurring process of enhancing the HSE Management system in order to achieve improvement in overall HSE Performance consist with the ADWEA policy</u>
<b>Corrective action</b>	Action to eliminate the cause of detected <b>nonconformity</b> or other undesirable situation.
<b><u>document</u></b>	<u>Information and its supporting medium (paper, magnetic, electronic or optical computer disc, photograph or master sample, or combination thereof).</u>
<b><u>Hazard</u></b>	<u>Source ,situations or act with a potential for harm in terms of human injury or <b>ill health</b> ,or combination of these</u>
<b>Hazard Identification</b>	Process of recognizing that a <b>hazard</b> exists and defining its characteristics.
<b><u>ill health</u></b>	<u>Identifiable, adverse physical or mental condition arising from and/or made worse by a work activity and/or work-related situation.</u>
<b><u>incident</u></b>	<u>Work-related event(s) in which an injury or <b>ill health</b> (regardless of severity) or fatality occurred, or could have occurred. An incident which gives rise to injury, ill health or fatality called "<b>Accident</b>". An incident where no injury, ill health or fatality occurs may be also referred to as "<b>near-miss</b>", "<b>near hit</b>", "<b>close call</b>" or "<b>dangerous occurrence</b>".</u>
<b><u>Interested parties</u></b>	<u>Person or group, inside or outside the <b>workplace</b>, concerned with or affected by <b>HSE Performance</b> of ADWEA.</u>
<b><u>Nonconformity</u></b>	<u>Non-fulfilment of a requirement and can be any deviation from (HSE Management system requirements and relevant work standards, practices, procedures legal and other requirements).</u>

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**HSEMS**

An integrated Health, Safety and Environmental Management System based on the requirements of OHSAS 18001:2007 and ISO 14001:2004 standards. i.e. ADWEA structure, responsibilities, practices, procedures and resources for implementing Health, Safety and Environment Management.

**HSE Objectives**

Goals, in terms of HSE performance, that ADWEA sets itself to achieve, consistent with HSE policy.

**HSE Performance**

Measurable results of ADWEA management to its HSE risks

**HSE Policy**

Overall intentions and direction of an organization related to its HSE Performance as formally expressed by top management.

**organization**

Company, corporation, firm enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

**Preventive action**

Action to eliminate the cause of a potential **nonconformity** or other undesirable potential situation

**procedure**

Specified way to carry out an activity or a process.

**records**

Document stating results achieved or providing evidence of activity performed

**Risk**

Combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or **ill health** that can be caused by the event or exposure(s).

**Risk Assessment**

Process of evaluation the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable.

**Work place**

Any physical location in which work related activities are performed under the control of the organization

**Contractors**

All parties working for the company either as a direct Contractor or sub-contractor. It also includes Contracted Personnel who are sponsored by an agent.

**Coordinator:**

The person who will coordinating HSE activities in his/her department.

**Department HSE Focal Point**

Representative from each Directorate/department well aware and conversant with all the departments activity and systems of work, acting in behalf of their top management and responsible for implementing the HSEMS in their departments.

**Discharge**

A release to the environment including emissions, effluents and solid/hazardous waste disposal.

**Effluent**

A liquid discharge, usually referring to water-borne discharges to surface water, groundwater or land.

<b>Emissions</b>	Intermittent or continuous release of gaseous contaminants to the environment, usually an atmospheric discharge.
<b>Environmental Aspects</b>	An element of an organization's activities, products or services that can interact with the environment
<b>Environmental Impacts</b>	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services
<b>ALARP</b>	Means to reduce a risk to a level which is "as low as reasonably practicable" and involves balancing reduction in risk against the time, trouble, difficulty and cost of achieving it.
<b>HAZOP</b>	(Hazard And Operability Study), a technique by which a team critically examines a design and/or a process through a series of logical and systematic questions for the purpose of identification and assessment of potential hazards and their consequences which prevent efficient operation.
<b>HSEIA</b>	Health, Safety and Environment Impact Assessment including, as required, Risk Assessment, HAZOP, Health and Environment impact assessment.
<b>Independent Party</b>	Individual or group independent from ADWEA company conduct an activity for ADWEA company based on a scope of work developed by ADWEA.
<b>I.W.P.P.</b>	Independent Water and Power Producers
<b>Lost Time Incident (LTI)</b>	Any work related injury or illness, which prevents that person from doing work the day after the incident/injury.
<b>Management Review Team</b>	Team comprises of Directors, Head of Planning and development, HSE Specialist and chaired by <b>organization</b> chairman.
<b>Occupational Illness</b>	An abnormal condition (physical or mental) that is caused or aggravated by prolonged or repeated exposure to environmental factors associated with employment, including chemical, physical, biological and ergonomic factors i.e. sunburn, loss of hearing, chemical harms, Food poisoning is considered as occupational illness.
<b>Performing Authority</b>	The party/section in charge of an activity/task/job/project and related personnel.
<b>PHSER</b>	Project Health, Safety & Environmental Review



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<b>Responsible Department</b>	The department responsible for implementing the actions.
<b><u>Sector Regulating Authority (SRA)</u></b>	<u>ADWEA</u>
<b><u>Targeted entities</u></b>	<u>All ADWEA affiliated companies and relevant power sector bodies</u>
<b><u>Competent Authority</u></b>	<u>Environment Agency – ABU DHABI</u>

## 1.9 LEGAL STRUCTURE

Abu Dhabi Water and electricity Authority is established as a public organisation, wholly owned by the Government, for carrying out duties given under Law No 2 of 1998.

The authority has a separate legal personality, has the capacity to act as such in accordance with this Law, and has financial and administrative independence to carry out its affairs.

A board of management, including a Chairman appointed by an Amiri Decree manages the authority.

The authority determines all matters relating to the formulation development and implementation of the policy of the Government in relation to the water and electricity sector, including all matters relating to the privatisation of the water and electricity sector.



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## 2 ORGANISATION

### DIRECTORATES FUNCTIONS & OPERATIONS

Each Directorate is divided as needed in Divisions, Departments, Sections and Units.

#### 2.1 PROJECTS DIRECTORATE

Under the authority of the Project Director, this Directorate is responsible to:

- Develop and maintain project management process, which specifies clear roles and responsibilities, standards, procedures and performance indicators;
- Propose improvement to the Group processes;
- Prepare, propose and manage engineering standards for ADWEA group, including QA/QC;
- Provide Quality Assurance and Quality Control support to ADWEA group project activity;
- Coordinate with affiliates management to develop a 10-year Project Plan which meets the expansion needs of the Power and Water Sector, in order to understand the strategic project issue within it;
- Provide a rolling 2-year project plan for the sector, in conjunction with Affiliates;
- Ensure a process for efficient procurement of consultant services for projects to be executed by the Project Directorate under current delegation of authority;
- Ensure a process for efficient procurement and execution of projects as required under current delegation of authority;
- Report on physical and financial progress of projects;
- Benchmark ADWEA Group Project performance, develop performance indicators and report against them; and,
- Assist Affiliates to strengthen their Project Management capabilities.

This Directorate comprises the following Departments: Water projects, Electrical projects, Planning and control and QA/QC Section.

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### 2.1.1 PROJECTS DEPARTMENTS (WATER AND ELECTRICITY)

Projects Department Heads report to the Project Director. Each project Department has responsibilities to, but not limited to:

- Manage the project Management Process, which specifies roles and responsibilities, project procedures and performance indicators across ADWEA Group;
- Analyse all aspects under their responsibilities of the 10-year project plan and identify key strategic issues;
- Procure and manage consultancy services for assigned projects;
- Efficiently and safely, execute the procurement and implementation of assigned projects, including management of consultants, contractors, and interface with the Affiliates;
- Report on progress of Projects;
- Assist in benchmarking ADWEA Group Project performance; develop performance indicators and report against them; and,
- Coach and advise affiliates concerning Project Management.

### 2.1.2 PLANNING AND CONTROL DEPARTMENT

The Planning and Control Department Head reports to the Director of Projects Directorate. The responsibilities of this Department are, but not limited to:

- Maintain Group Project Management Process;
- Produce and maintain 2-year plans showing all active projects in the period;
- Ensure consistency with 5-10-year plans;
- Liaise with Consultants and Contractors to ensure plan consistency;
- Update plans, based on progress dates provided by Consultants and Contractors;
- Maintain drawing and document registers and archive active projects;

- Provide Cost Control Support;
- Provide administrative and clerical support to the Division; and,
- Provide advice to affiliate.

### **2.1.3 QUALITY ASSURANCE AND QUALITY CONTROL SECTION**

The QA/QC Section reports to the Director of Projects Directorate. The responsibilities of this section are, but not limited to:

- Develop, maintain and communicate ADWEA Group Engineering Standards Including:
  - Design, piping, cabling and materials standards and codes,
  - QA/QC processes, including inspection and testing,
  - Drawings office standards,
- Provide advices on engineering standards and AC/AC to Affiliates and to ADWEA;
- Develop and manage third party contracts for the provision of inspection, testing services and for audits of suppliers; and,
- Provide technical support to ADWEA Group.

## **2.2 BUSINESS SUPPORT DIRECTORATE**

Under the authority of a Business Support Director, this Directorate comprises the following Divisions: Human Resources and Administration, Supply Division, Information Technology Division and Finance Division.

### **2.2.1 HUMAN RESOURCES & ADMINISTRATION DIVISION**

Under the authority of the Human resources and Administration Division Manager, this Division is responsible to:

- Develop the ADWEA Manpower Plan and submit it to Senior Management Team;



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- The recruitment Process for ADWEA staff, within the current delegation of authority, and assistance to affiliate as required;
- Develop and management of appropriate competency requirements and training plans, in conjunction with line management;
- Maintain staff appraisal and career development systems;
- Custodian of ADWEA Group Personnel Policy Manual;
- Interpret personnel policy for ADWEA and advice to the affiliates;
- Mentor and develop HR staff across ADWEA and the Affiliates;
- Employee administration in accordance with ADWEA policies;
- Pro-active development of the UAE National workforce;
- Manage of Administration services including outsourced service contracts;
- Custodian of the ORACLE HR Management System; and,
- Organise or supervise the training.

### **2.2.2 SUPPLY DIVISION**

Under the authority of the Supply Manager, this Division is responsible to:

- Provide a centralised HSE oriented and cost effective procurement service for ADWEA and affiliated companies;
- As a Division, it maintains integrity and control over the procurement, contracts and material management process and ensures that ADWEA approved policies, procedures and delegation of authority are followed in the interest of ADWEA and its group of Companies; and,
- Maintain all Approvals and Qualifications of ADWEA's Suppliers.

This Division comprises the following Departments: Contracts, Material Management & Strategies, Supply Support and Purchasing.

### 2.2.3 INFORMATION TECHNOLOGY

Under the authority of the IT Division Manager, this Division is responsible to:

- Develop, agree and maintain an ADWEA Group IT strategy, IT Plan and a Management System which set out the strategy, process roles and responsibilities, interfaces and performance goals through ADWEA and the affiliates can make best use of the IT technologies in support of their business;
- Encourage the development of the affiliate's competency in IT management;
- Host, manage and provide technical support for assigned IT common system (e.g. e-mail), common applications, (Maximo, Oracle Financial, Oracle HRMS, GIS) and network for the ADWEA Group, and provide agreed support to users;
- Report performance against agreed goals to the IT User Committee;
- Propose IT development Projects to the IT Committee;
- Manage customer services including IT helpdesk and hardware installation; and,
- Provide back up and disaster recovery services and 2<sup>nd</sup> level support on corporate mission critical application.

### 2.2.4 FINANCE DIVISION

Under the authority of the Finance Division Manager, this Division is responsible to:

- Provide accurate and timely accounts for the ADWEA Group;
- Provide leader leadership, and support to the ADWEA Affiliates in order to strengthen their finance capabilities;
- Provide coaching to ADWEA Directorates / Divisions in the correct management of financial processes;
- Maintain and develop the Financial Procedures, Systems and Processes of the ADWEA Group;
- Complete the financial hand over from the Water and Electricity Department;
- Provide budget coordination and support;

- Provide timely and meaningful analysis of variance against budget and analysis of financial performance;
- Account for projects, which are currently directly funded by the Government;
- Efficiently execute financial transactions delegated to the Financial Division under the current delegation of Authority; and,
- Provide an insurance strategy for the ADWEA Group and insurance claims service.

### **2.3 PLANNING AND DEVELOPMENT DIRECTORATE**

Under the authority of the Planning and Development Director, this Directorate has a corporate role in the ADWEA Group and has four areas of responsibilities.

#### **2.3.1 MANAGEMENT AND DEVELOPMENT DEPARTMENT**

Management Development Department is responsible for the Group organisation & development, the development monitoring implementation of Human Resources Policies, Procedures.

#### **2.3.2 BUSINESS PLANNING & PERFORMANCE DEPARTMENT**

Under the responsibility of a Business Planning & Performance Department Head this Department is responsible for: the development of corporate business objectives, consolidation of business plan for each company group and ensure its compliance with short and long terms objectives, developing key performance indicators for each activity in the group, monitor performance and recommend remedial actions, Also responsible for various business processes and activities such as Quality, Health, Safety and Environment.

#### **HSE Unit**

The principal role of this unit is to plan, develop, co-ordinate, audit & promote Health, Safety & Environmental Protection in all aspects of ADWEA and its group companies' activities and advise ADWEA's Management on the means and strategies to achieve total loss control through it's advisory, auditing & monitoring role.

The key responsibilities of this unit are to:

- Develop, update and communicate the company's HSE policies;
- Develop, update, communicate & co-ordinate the company HSEMS and the annual programs for implementation;
- Set, communicate and update the company HSE standards, procedures, code of practices and guidelines to be in line with the local & international regulations and standards and ensure their proper implementation;
- Assist & advise the ADWEA group companies on HSE implementation;
- Asses/audit and monitor ADWEA's and other group companies' HSE Management Systems;
- Set, update & co-ordinate the implementation of the HSE training standards and programs; and,
- Set HSE performance measures for ADWEA and the group companies based on the annual HSE objectives & targets.

### **2.3.3 DIGITAL SYSTEM DEPARTMENT**

Under the Authority of Digital System Department Head, this Department is responsible to:

- Drive the effort for ADWEA to become an Organisation with Business process design based on Digital Utility concept;
- Recommend automation of various feasible business operation and activities leading to the achievement of Digital Utilities objectives;
- Explore the introduction of required systems to enable smoother and prompt decision making process within ADWEA management team in all area of operations, maintenance, asset Management, GIS, HR, Financial, etc.;
- Support users in corporate systems assignment under its function as decided by ADWEA Management and ensure the upgrading and enhancement of the same; and,
- Participate in discussions related to system integration, interfaces in order to ensure seamless digital system cross-functional requirements, and synchronised business processes.

## 2.4 PRIVATISATION DIRECTORATE

The Director of the Privatisation Directorate reports to the Chairman. This Directorate is responsible to:

- Define, study, specify and manage the procurement and implementation of Privatisation Projects (i.e. sales of asset, Extension of generation capacity to ensure security of supply in conformity with the Master Plan);
- Recommend to the Chairman the concept and strategy for privatisation of existing assets; and,
- Co-ordinate and supervise of all activities of ADWEA and its affiliates during the implementation to the commissioning of IWPP projects; interface and schedule co-ordination with the related turn key Projects.

## 2.5 RESEARCH CENTRE

The Research Centre Manager reports to the Chairman.

This Division comprises the following Research Laboratories; Electrical Energy Laboratory, Sea Water Desalination Laboratory, Material testing Laboratory, Hydraulics Laboratory, Co-generation Section and Instrumentation Services.

The establishment of a scientific and technical Section of specialised scientific engineers whose main responsibilities are to follow international scientific progress in the areas connected by the production and distribution of electricity and water.

The roles and responsibilities of the Research Centre amongst other are:

- Propose the research strategy of the ADWEA Group by:
  - Analysing opportunities that technology offers to improve performance and reduce cost;
  - Liaising with affiliates and the ADWEA Technical Advisor to agree in ADWEA's strategy for addressing technological opportunities;
- Review the sources of technical service to ADWEA's operations and project with all parties concerned and reach common understanding of the optimal service;
- Propose the 5 years plan and annual work programmes & Budget of Research Centre;
- Conduct research according to the agreed strategic plans;

- Undertake or manage technical services as agreed;
- Conduct all work in the Research Centre and at the clients' sites in a safe and environmental friendly manner;
- Enhance the technical capabilities of technical staff in the Affiliates;
- Develop a skilled and motivated technical staff;
- Promote the technical standing of ADWEA within the UAE and Internationally; and,
- Develop Third Party Business for the Research Centre.

## **2.6 CHAIRMAN OFFICE**

The Basic functions of the chairman office are to:

- Liaise with the Chairman and Board of Management members to prepare the agenda and assemble papers for the Board meetings, record and communicates the Board's decisions and recommendations;
- Liaise with the member of ADWEA group executive committee to prepare the agenda, assemble papers or the Executive Committee meetings, and communicate the Committee's decisions and recommendations;
- Ensure an efficient process for preparing and submitting papers to the ADWEA Chairman decisions to be taken as per the Chairman DELEGATION OF Authority, and for communicating decisions; and,
- Ensure a process for recording and follow-up decisions and recommendations.

## **2.7 CHAIRMAN ADVISOR**

- Advise ADWEA Chairman on Corporate Goals & Targets,
- Advise ADWEA Chairman on overall Implementation Strategy,
- Advise ADWEA Chairman on implementation Planning & Resources,
- Advise ADWEA Chairman on the overall implementation Process,

## 2.8 INTERNAL AUDIT

The Financial Audit Manager reports to the Chairman. The Financial Audit Division responsibilities and functions are to:

- Manage risk assessment process to support the planning of ADWEA group audit planning,
- Plan, propose and implement the agreed plan,
- Report findings immediately for the most urgent issues, at the end of each audit to the Auditees, and in summary monthly to the Chairman and Group of Executive Committee,
- Agree Corrective Actions, and follow up with the Auditees to ensure implementation,
- Derive general lessons concerning the effectiveness of ADWEA group accounting, control and financial systems processes and make improvement, recommendations to affiliates, ADWEA and the Chairman and group Executive committee.

## 2.9 LEGAL ADVISOR

The Legal Advisor report to the Chairman and has the following attributions.

- In charge of all legal matters related to ADWEA;
- Ensure ADWEA Group has effective processes for compliance with the law of UAE (especially Law No. 2 of 1998) and applicable local law; and,
- Define the rules of ADWEA for legal protection and provides related assistance and advice. Supervises legal disputes, involving ADWEA and its contractors, and processes other legal disputes. Provide advice on legal and contractual issues as required.



# HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL

**HSEMSM**

Effective Date: **18.06.2009**

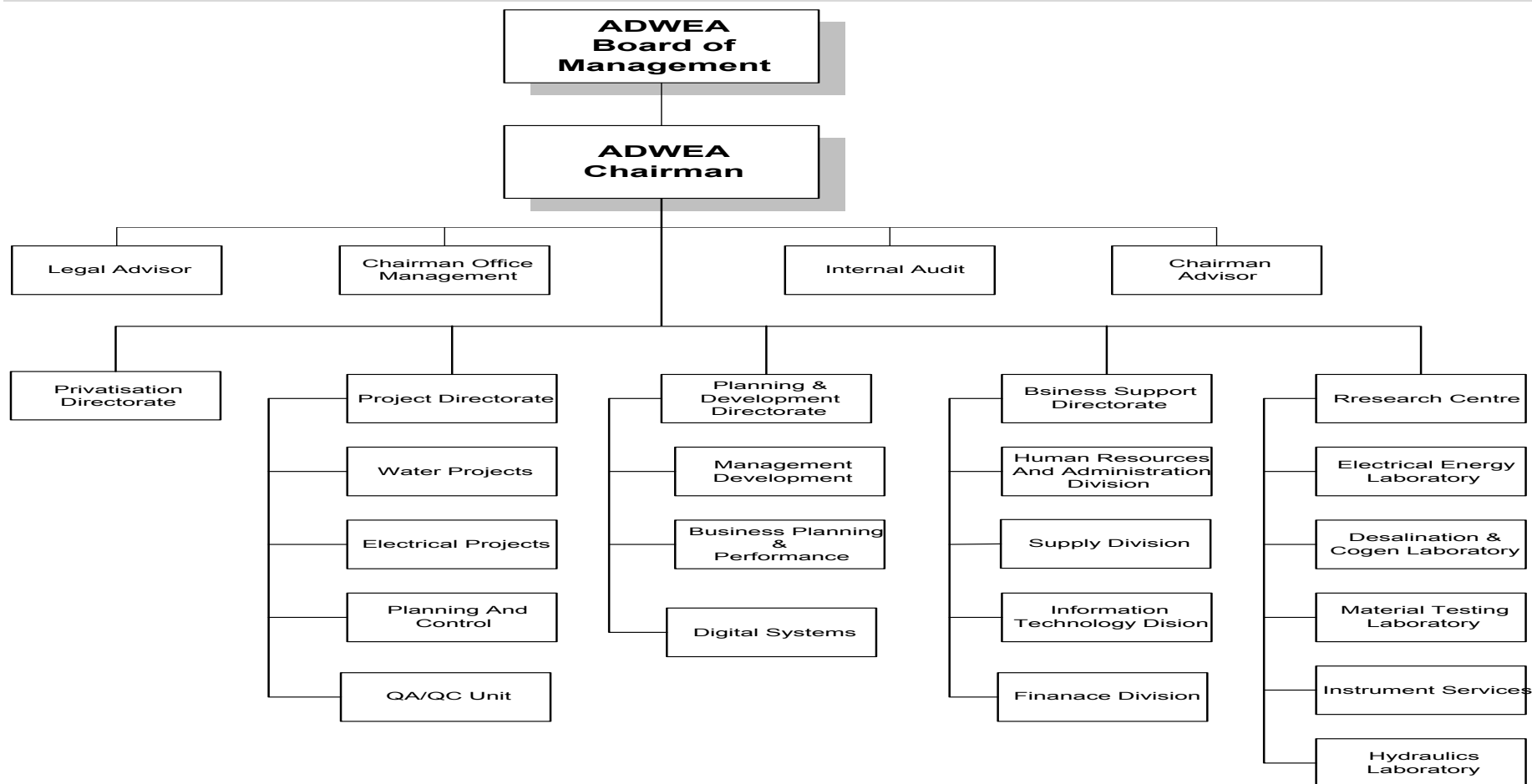
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## 2.10 ORGANISATIONAL CHART



## **2.11 ORGANISATIONAL DECISIONS, APPOINTMENTS, FUNCTIONS & DELEGATION WITH RESPECT TO HSE**

Apart from specific responsibilities, all ADWEA staff is required to:

- Maintain a current knowledge of all HSE matters relevant to their position;
- Carry out daily tasks according to defined procedures;
- Initiate action to prevent any non-conformance occurring in the HSE System, business Processes and project work;
- Identify and record the non-conformance when problems do occur;
- Recommend, initiate or provide solutions through the HSE Management Representative;
- Assist the HSE Management Representative in verifying the implementation of solutions;
- Produce records as required by the HSEMS; and,
- Contribute to the continual review and improvement of the HSEMS.

### **ADWEA CHAIRMAN**

- Acts as the highest level of authority in HSE related matters; and,
- Authorises and endorses the HSE Policy Statement and HSE Objectives, HSE Management Manual and Company Policies.

### **HSE Management Representative (Head of Business Planning and Performance)**

Notwithstanding any other responsibilities the HSE Management Representative shall:

- Drafts, maintains, authorises and distributes HSE System documentation;
- Administers the continual review of the system, including:
  - Internal (self), external (on Suppliers) and extrinsic (third party) audits,
  - Continuous improvement requests, clients complaints,
  - Management review meetings, and
  - Reports on the performance of the HSE System and recommends improvement.



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- Ensures all staff is aware of their responsibilities in the area of HSE.

In the absence of the HSE Management Representative, the HSE Specialist shall assume his responsibilities.

#### **DIRECTORS**

- Co-ordinates activities (Projects, Planning and Development, Business Support, Privatisation and Research Centre) in accordance with the documented HSE Management System.
- Ensures staff commitment to ADWEA Policy Statement and objectives and the HSE Management System.
- Carry out duties as defined in their position description or as required by the Chairman.

***NOTE: While each Director has an area of speciality, his or her responsibilities overlap. This team approach ensures any Director may assume another Director's responsibilities in the case of absence.***

***Each ADWEA Directorate and Division has its defined organisation. Organisation chart is available at the Directorate and Division level together with the concerned Department, Section and Units organisation and the related position descriptions.***

***Procedures and Instruction also define responsibilities and authorities.***

### 3 HSE MANAGEMENT SYSTEM STRUCTURE

ADWEA HSE Management System is comprised of a number of different elements

#### HSE Management System Manual

The HSEMS Manual provides an overview of the HSE System. It sets out in broad terms what the company intends to achieve by the adoption of a HSE System. It is the means by which the documented management system is authorised. It includes the 13 core “Elements” and their expectations as well as the HSEMS “Processes” & references to the “Procedures”.

#### HSEMS Processes

The Processes are flow chart description of the processes required to meet the expectations of the HSEMS Elements. They define the activities, responsibilities and deliverables of each process. Within the processes we clarify ‘what we do’, identifying the responsibilities, activities and deliverables for each stage of the process. The processes applicable to ADWEA are included in this HSEMS Manual.

#### HSEMS Procedures

Those documents define the rules and regulations applicable for ADWEA and its companies. ADWEA’s Planning & Development Directorate shall issue these documents.

#### HSEMS Work Instructions

These documents amplify, detail or give instructions to be followed in a step-by-step manner and related directly with Company process.

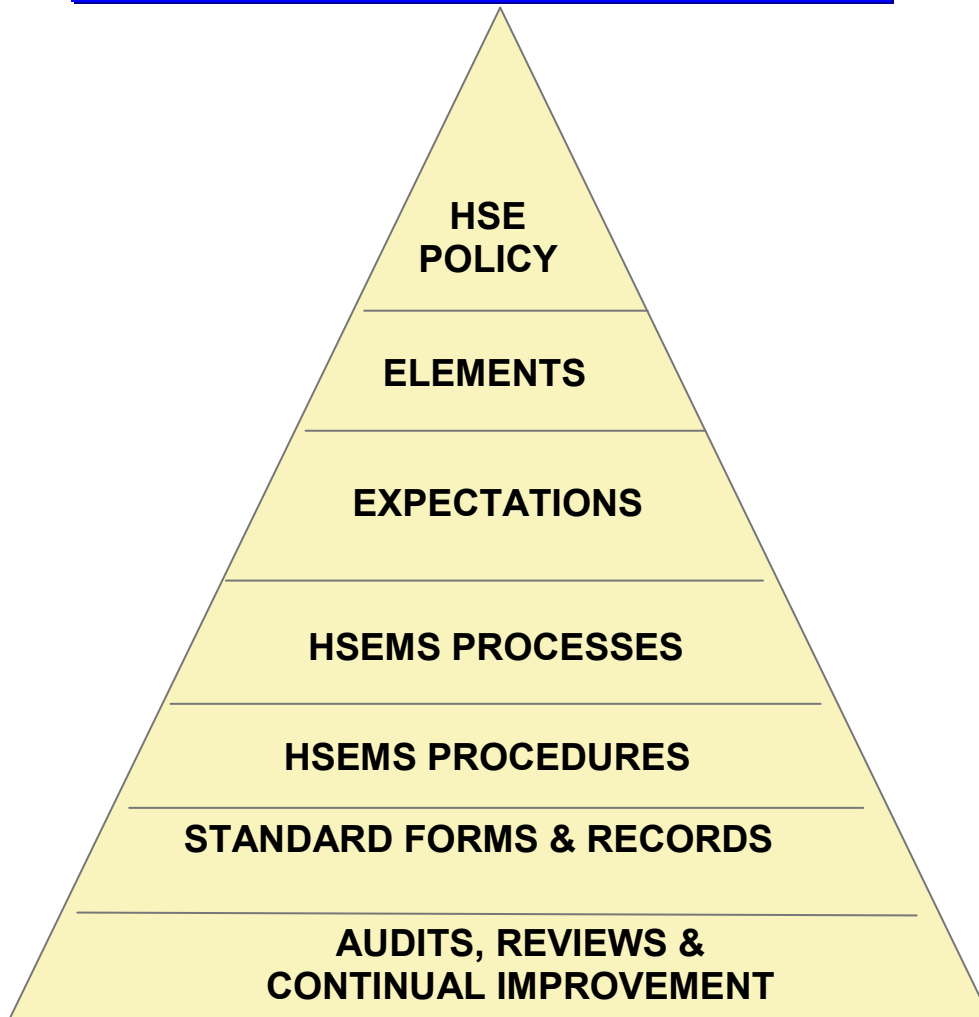
#### Standard Forms

These forms are documents that serve to register results or objective evidences that an activity has occurred.

#### HSE Records

HSE Records are the result of completed forms and checklists. The HSE Records index provides details of all relevant records, where they are retained, who are responsible for them, and the retention period.

## STRUCTURE OF THE HSEMS:





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**ANNEX 1: LIST OF HSEMS PROCEDURES  
COMPLYING TO ISO 14001 & OHSAS 18001 REQUIREMENTS**

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1. Procedure for writing & numbering internal documentation.
2. Procedure for Document & Data Control.
3. Hazard and Operability study (HAZOP) procedure.
4. HSE Audits Procedure
5. HSE Evacuation plan procedure.
6. HSE Impact assessment procedure.
7. HSE requirements of contractors.
8. HSE Training Procedure.
9. HSEMS Assessment Procedure.
10. Incident Reporting, Investigation and analysis procedure.
11. Operational Control Procedures.
12. Procedure for control of records.
13. Procedure for legal and other requirements.
14. Procedures for monitoring and measurement of HSE aspects.
15. Procedures for non-conformances-corrective & preventive action.
16. Risk Management Procedure.
17. Standards for effluent and emissions discharge procedure.
18. Waste Management Procedures and Guidelines

**ANNEX 2: CORRESPONDENCE OF HSEMS  
ELEMENTS TO ISO 14001 & OHSAS 18001**

	<b>ADWEA HSEMS ELEMENTS</b>	<b>OHSAS 18001/ISO 14001 REQUIREMENTS</b>
<b>1</b>	<b>Commitment &amp; Leadership</b>	HSE Policy (clause 4.2), HSE Objectives (clause 4.3.3)
<b>2</b>	<b>HSE Organization &amp; Competency</b>	<u>Resources, Roles, Responsibilities, Accountability and Authority (clause 4.4.1), competence Training, and awareness. (Clause 4.4.2)</u>
<b>3</b>	<b>Legal Requirements</b>	Legal & other requirements (4.3.2)
<b>4</b>	<b>Risk Management</b>	<u>hazard identification , risk assessment and determining controls (4.3.1)</u>
<b>5</b>	<b>Environmental Protection</b>	Environmental Aspects (4.3.1), Operational Control (4.4.6)
<b>6</b>	<b>Information &amp; Documentation</b>	Documentation (4.4.4), <u>Control of documents (4.4.5)</u> , Control of records (4.5.4)
<b>7</b>	<b>Communication</b>	<u>communication , participation and Consultation (4.4.3)</u>
<b>8</b>	<b>Occupational Health &amp; Hygiene</b>	Operational Control (4.4.6)
<b>9</b>	<b>Operational Control</b>	Operational Control (4.4.6)
<b>10</b>	<b>Emergency Management</b>	Emergency preparedness and response (4.4.7)
<b>11</b>	<b>Contractor Management</b>	Operational Control (4.4.6)
<b>12</b>	<b><u>Incident Reporting &amp; Investigation</u></b>	<u>Incidents, investigation (4.5.3.1)</u>



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**13 Audits & Continual Improvement**

*Internal Audit (4.5.5), Performance measurement & monitoring (4.5.1), Objectives and program (4.3.3), Management Review (4.6)*



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**ANNEX 3: HSEMS ELEMENTS**



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**ANNEX 4: HSEMS PROCESSES**

60 processes have been identified for the ADWEA & its group companies, out of these 47 are applicable to ADWEA activities, these are listed below and attached in the following pages:

S.N	Process Title	Remarks
1	Top Management HSE Visits	NA
2	Action Tracking	
3	HSE Policy Review	
4	Management Team HSE Meetings	
5	HSE Award	NA
6	HSE Awareness Campaign	NA
7	Delegation of Authority	
8	Sharing HSE Information	
9	Establishment of HSE Objectives & Targets	
10	Annual HSE Plans	
11	HSE Training Needs	
12	Evaluation of HSE Training Providers	
13	HSE Competency Assessment	
14	HSE Roles and Responsibilities	
15	Establishment of HSE Organization	
16	HSE Induction	
17	Communication with Authorities	
18	Identification of HSE Legislation and Regulation	
19	HSE Documents Management	
20	HSE Monitoring & Measurement	
21	Contractor Pre-qualification	
22	Contractor Performance	
23	Contract Specification and Tender	
24	Project HSE Plan	
25	Project HSE Review	
26	Emergency Response Planning	
27	Emergency Response Equipment	NA
28	Medical Response Plan	
29	Emergency Response Exercises	NA
30	Task Risk Assessment	NA
31	Toolbox Talks	NA
32	HSE Inspection	
33	Health Risk Assessment	
34	Hazard and Operability Study ( HAZOP)	
35	Ergonomic Assessment	
36	Environmental Impact Assessment	
37	Management of Emissions & Effluents Discharge	
38	Chemicals Management	
39	Hazardous Substances Management	
40	Incident Reporting & Investigation	

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S.N	Process Title	Remarks
41	Near Miss Reporting	
42	Pre-employment Medical	
43	In-service Medical Check-up	
44	Handing Over	NA
45	Isolations	NA
46	Lifting Operations	NA
47	Dispensation	NA
48	Personnel Protective Equipment (PPE)	NA
49	Energy and Natural Resource Management	
50	Project Interfaces with Existing Set-up	
51	Water Quality Control	
52	HSE Suggestion Scheme	
53	HSE Standards and Procedures	
54	HSEMS Self Audit	
55	Manage Changes to HSEMS	
56	Management of Change	
57	Permit to Work System	NA
58	Waste Management	
59	HSE Internal Audits	
60	Maintenance & Testing of HSE related equipment	