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SWAZILAND WATER SERVICES CORPORATION SAFETY, HEALTH & ENVIRONMENT MANAGEMENT SYSTEM POLICY MANUAL

APPROVED BY: Peter N. Bhembe POSITION: Managing Director

This Policy Manual is applicable to the following Management Systems;

- ISO 14001:2015
- OHSAS 18001: 2007

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GUIDANCE ON USING THIS MANUAL:

This document is an integrated <u>Environmental Management System</u> (ISO 14001:2015) and <u>Occupational Health and Safety Management System</u> (OHSAS 18001:2007) policy manual. To accommodate requirements of both management systems, sections relating to ISO 14001:2015 are headed in <u>RED</u> whilst sections applicable to OHSAS 18001:2007 are headed in <u>BLUE</u>. Generic sections are headed in <u>BLACK</u>. Should you seek clarification please refer to the document generator.

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1. INTRODUCTION

1.1 Purpose of SHEms quality manual

The purpose of this SHE Management System (SHEMS) Policy Manual is to provide Top Management direction to the design, development, documentation, implementation, maintenance and improvement of SHEms at Swaziland Water Services Corporation.

This 1st tier Policy Manual provides the overarching context to direct and drive the 2nd tier policy procedures and the 3rd tier operational procedures.

This manual shall be reviewed at least once annually and revised where necessary to ensure continued suitability, adequacy and effectiveness.

1.2 Organizational overview

The Swaziland Water Services Corporation is a parastatal of the Ministry of Natural Resources and Energy. It was established in terms of the Water Services Act 12 of 1992 from the then Swaziland Water and Sewerage Board, which empowered it to be the sole public owned provider of potable water and sewerage disposal services in designated urban and peri-urban areas, in a manner consistent with commercial management practices.

The service provision responsibility is echoed and enshrined in the Corporation's mission statement, which is "to provide quality water and wastewater services, effectively meeting customer needs in a growing market through sound management policies, strategies and improving technology, whilst maintaining a safe environment for employees and the communities being served."

1.3 Name of the scoped organization

Swaziland Water Services Corporation

1.3.1 Scope

The treatment of potable water in the Matsapha, Woodlands, Nhlangano and Simunye Water Treatment Plants, including the support services rendered by the Headoffice

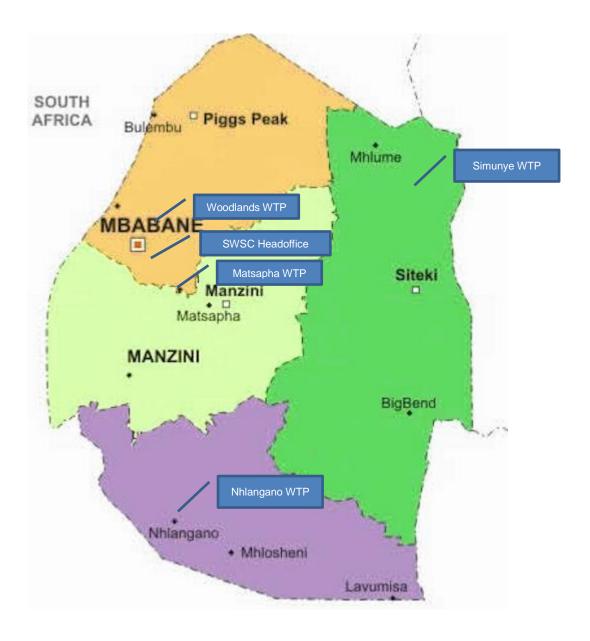
1.3.2 Exclusions

None

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1.4 Location of the scoped organization

The Matsapha Potable Water Treatment Plant is located in Matsapha to the west of Manzini along the MR3 highway; Simunye Water Treatment Plant is located in the Lubombo Region next to the RSSC mill; Woodlands Water Treatment plant is located in Mbabane - Thembelihle, Nhlangano Water Treatment plant is in the South west region whilst the headoffice is located at Ezulwini.



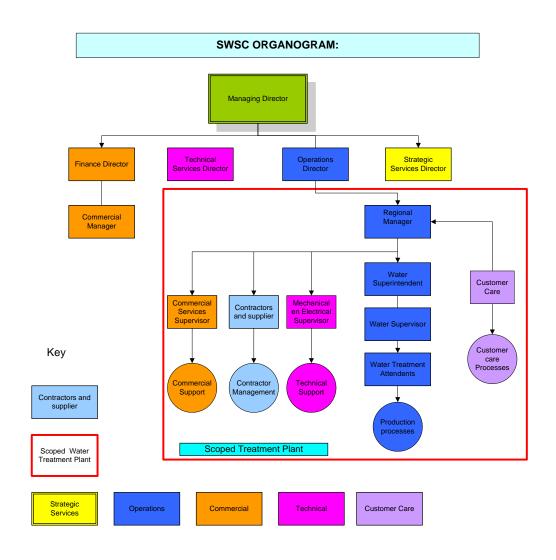
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1.5 Line of business

SWSC under authorisation of the Water Services Act (12 of 1992) abstracts raw water and purify it to meet drinking water guidelines as defined in terms of the World Health Organisation (WHO) drinking water guidelines and to further distribute the treated water to customers. These core activities takes place at the scoped treatment plants whilst the headoffice provides support services to the water treatment plants.

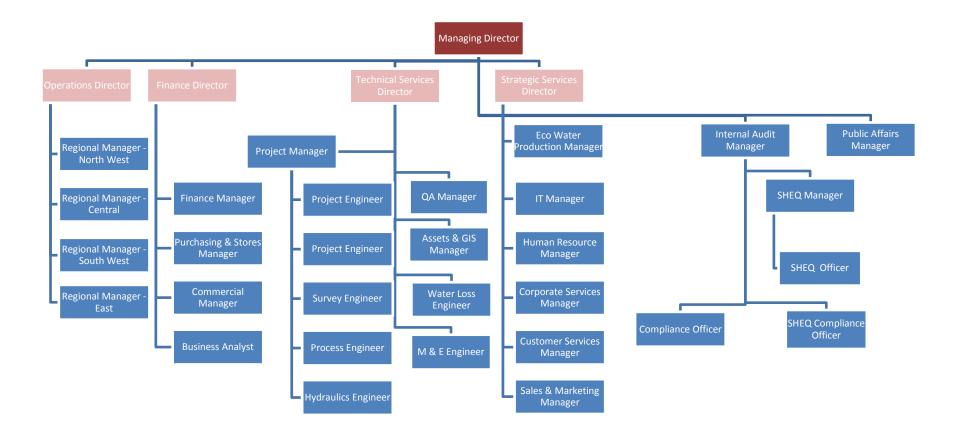
2 ORGANIZATIONAL SET-UP

2.1 Organogram - Water Treatment Plant



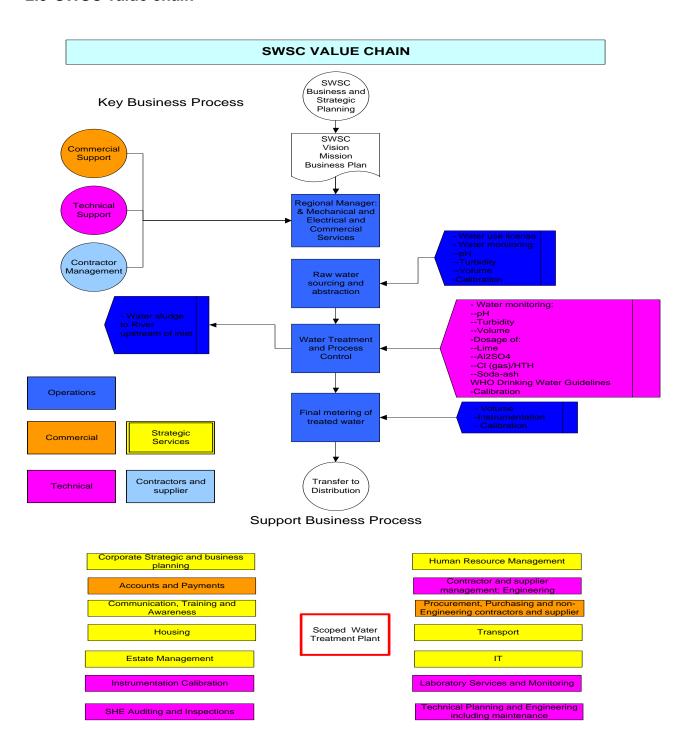
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2.2 ORGANOGRAM - HEADOFFICE



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2.3 SWSC value chain



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3. BUSINESS PROCESSES

3.1 Key Business Processes at a Water Treatment Plant

The key business processes are illustrated as follows;

3.1.1 Raw Water Receiving

The purpose of this process is to reliably and lawfully introduce raw water into the intake works at the plant. Raw water intake infrastructure is kept functional, to reliably yield the required volumes to meet demand on a sustainable basis. All infrastructures are proactively maintained to ensure sustained fitness for purpose, while all relevant staff is kept competent to do the tasks assigned to them to meet the desired quality of the product.

3.1.2 Chemical Dosing

The purpose of this process is to adequately add the correct amount of water treatment chemicals to facilitate the initial stages of the water treatment process. The chemicals dosed include Lime or Soda Ash for pH correction and Aluminium Sulphate for the Coagulation process.

3.1.3 Clari-flocculation

The purpose of this process is to remove particulate impurities, especially non-settleable solids (particularly colloids) and colour from the raw water being treated. The facilities are managed and monitored at all times, to prevent poor quality drinking water being released for consumption.

3.1.4 Filtration

The purpose of this process is to remove finely divided particulate matter that could not be eliminated in the clari-flocculation process. The filtration process is achieved by passing the water through a layer of sand media allowing most of the particulate matter to be trapped on the surface of the top sand layer.

3.1.5 Disinfection

The purpose of this final process is to eliminate bacteria in the treated water, as prescribed by WHO guidelines, to prevent possible spread of waterborne diseases to consumers. This process is achieved by the use of chlorine gas or Chlorine granules which is dosed in adequate quantities at the contact tank as guided by the SWSC water quality standards.

NB -- Handling, storage and use of chlorine is one of SWSC's most significant aspects. Chlorine is managed to remain lawful and safe, supported by effective emergency detection and response arrangements. Staff handling chlorine is kept competent.

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3.1.6 Pumping

SWSC Potable Water Treatment plants pumps treated water to the storage reservoirs and monitors the water levels of the reservoir to ensure a sustainable supply of treated water and to prevent loss of the product through overflows and other causes. SWSC also conducts schedule reservoir cleansing and maintenance works to ensure supply of quality water to clients.

Water quality monitoring in storages outside the treatment plant up to the consumer meter is done routinely by the ISO 17025 Accredited SWSC Central Laboratory to ensure sustained water quality.

3.2 Business support processes (HEADOFFICE)

The supporting business processes and roles are illustrated in **section 2.2** above. These support business processes ensure that essential inputs such as materials, Human resources, finances, machinery, and infrastructure are readily available to support the core business processes in line with the strategic direction of the organisation.

The SHEms support services rendered by the headoffice are:

3.2.1 Commercial / Purchasing Services

The commercial services concludes service level agreements and contracts with all its customers

- manage the procurement process
- pay suppliers and service providers
- Manage stock and non-stock items.

Suppliers of chemicals and other goods are engaged through the supplier evaluation process to ensure they have the capacity and meet all applicable requirements to supply products and services that are environmentally sustainable, non-harmful to employees and enhance SWSC's product and service delivery.

3.2.2 Customer Care Services

The customer care services department is responsible for determining and setting up a platform for enhancing customer and stakeholder relations. Customer communication is formally received and actioned through our 24 hour call centre. This department is also responsible for customer education and awareness programmes.

3.2.3 Maintenance & Engineering (Technical)Services

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M&E department ensures sustained, reliable, safe, lawful and efficient equipment, facilities and energy resources to SWSC though routine maintenance of mechanical and instrument equipment.

3.2.4 Human Resources

The HR Department is responsible for ensuring maintenance of a qualified and competent staff compliment. It additionally plays a central role in coordinating and implementing training and development needs. The welfare of employees and industrial relations are also dealt with at this department

3.2.5 IT Department

The Information and Technology department ensures smooth running and maintenance of the Corporations hardware and software. The department also plays a pivotal role in assisting departments with information backup

3.2.6 Corporate Services Department

This department ensures maintenance and sound management of the Corporation's infrastructure and work environment. Additionally the departments manages fleet and security services.

3.2.7 Public Affairs Department

The department ensures establishment and management of proper and effective communications channels internally and external, including liaising with interested and affected parties during service delivery.

3.2.8 Internal Audit Department

This department plays an internal auditing role to ensure that the operations and processes of the Corporation aligns to laid down policies, procedures and legal requirements.

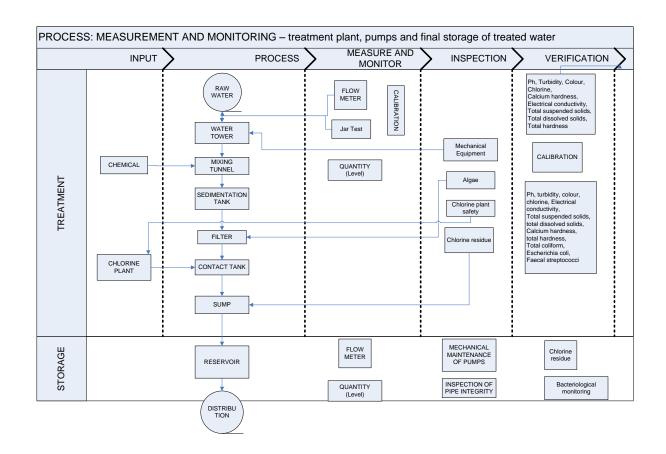
3.2.9 Accounts Department

Their responsibility is to implement and maintain an effective accounting system. The department also plays a central role in effective payments, both to suppliers and employees.

3.2.10 Business Analysis

The department analysis business trends within the Corporation and make recommendations. They are also responsible for exploring and advising on possible opportunities of economic growth.

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4. SHE MANAGEMENT SYSTEM

4.1 A) General requirements (OHSAS 18001:2007)

Swaziland Water Services Corporation (SWSC) has developed a SHE Management System described in this manual to demonstrate capability to consistently provide products that meet customer and applicable regulatory requirements, and to operate with increased effectiveness and efficiency with the overall aim of enhancing customer satisfaction in line with the corporation's vision to delight the customer. This is done by periodically reviewing the SHEMS through planned audits and management reviews, to ensure its continuing suitability, adequacy and effectiveness towards meeting customer, statutory and regulatory.

To achieve the above, the organization has;

- a) Determine the processes needed by the SHEms and their application throughout the organization,
- b) Determine the sequence and interaction of these processes,
- c) Determine criteria and methods needed to ensure that both the operation and control of these processes are effective,
- d) Ensure the availability of resources and information necessary to support the operation and monitoring of these processes,
- e) Monitor, measure where applicable, and analyse these processes, and
- f) Implement actions necessary to achieve planned results and continual improvement of these processes.

4.1 B) Understanding the organisation and its context (ISO 14001:2015)

SWSC make use of its strategy review and planning sessions to identify both internal and external issues that can impact performance of the Corporation. External factors as identified in the strategic plan include political, economic, social, technological, legal, demographic and geographic factors. Internal factors include staff competency, systems and infrastructure and performance. These issues are described in detail in the document SWSC Strategic Plan 2018-2021 at organisational level and more specifically on Contextual Issues registers for each water treatment plants

4.2 A) Documentation requirements (OHSAS 18001:2007)

4.2.1 General

The SHEms documentation includes the following;

- a) Documented system of a SHE policy and objectives,
- b) A SHE manual,
- c) Documented procedures and records required by the relevant ISO standards
- d) Documents, including records, determine by the organization to be necessary to ensure the effective planning and control of its processes.

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4.2.2 SHE Policy manual

Swaziland Water Services Corporation has established and maintains a SHE policy manual which includes;

- a) The scope of the SHEms, including details of and justification for any exclusions
- b) The documented procedures established for the SHEms, or reference to them, and
- c) A description of the interaction between the processes of the SHEms.

4.2.3 Control of documents

The Document Control Procedure defines the controls needed for handling our management system documentation, including documents of external origin.

A documented procedure has been established to define the controls needed;

- a) To approve documents for adequacy prior to issue,
- b) To review and update as necessary and re-approve documents,
- c) To ensure that changes and the current revision status of documents are identified,
- d) To ensure that relevant versions of applicable documents are available at point of use.
- e) To ensure that documents remain legible and readily identifiable,
- f) To ensure that documents of external origin determined by Swaziland Water Services Corporation, to be necessary for planning and operation of the SHEms are identified and their distribution controlled, and
- g) To prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

4.2.4 Control of records

Records established to provide evidence of conformity to legal, statutory and WHO Drinking Water Guidelines as well as those required for the effective operation of the SHEms are controlled as per Records Control Procedure. This procedure defines the controls required for the identification, storage, protection, retrieval, retention and disposition of records.

4.2 B) Understanding the needs and expectations of interested parties (ISO 14001:2015)

The Corporation has identified and analysed needs and expectations of interested parties through a stakeholder analysis conducted as part of the strategic planning process. The Corporation believes that the identification of the key role played by stakeholders is vital in the effective implementation of the strategic plan. The main objective of stakeholder analysis in strategic planning is to appreciate the roles of each stakeholder in strategic decision making. See SWSC Strategic Plan 2018-2021 for the stakeholder analysis which are detailed on the interested parties registers for specific facilities.

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The following is a non – exhaustive list of some identified interested parties as stakeholder analysis is done on an ongoing basis

- Swaziland Government 100% ownership of SWSC
- Customers (Service users)
- Suppliers partnerships and service level agreements
- External finance providers loan funding
- Strategic Partnerships other parastatals, government institutions, etc.
- Employees
- Community
- Politicians
- Regulators

4.3 Determining the scope of the environmental management system (EMS)

In defining the scope of implementing the EMS, the Corporation has considered the external and internal issues affecting the organisation as highlighted in section 4.1 as well as the needs and expectations of interested parties and compliance obligation as highlighted in section 4.2. Due to its wide national coverage, the Corporation implements a multi-site EMS while considering its authority and ability to exercise control and influence on services/activities rendered over these sites as empowered by the Water Services Act of 1992. The corporation's non scoped sites are periodically added to the EMS certification scope in line with the organisation's strategic .The mandated activities of the Corporation are confined to the Kingdom of Eswatini and this has also been taken into consideration when defining the EMS scope. The EMS scope as described into detail below is made available to interested parties upon request.

4.3.1 SHEMS Scope

The treatment of potable water in the Matsapha, Woodlands, Simunye and Nhlangano Water Treatment Plants, including the support services rendered by the Headoffice

4.3.2 Description of the SHEMS Scope

The scope includes controllable activities, products, services and facilities from:

Matsapha, Woodlands, Simunye & Nhlangano Water Treatment Plants

- Raw water receiving (Excluding Abstraction)
- water treatment,
- metering of water quantity
- monitoring of water quality
- · operational maintenance,
- Plant Laboratory

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Outsourced services

- Contractors & suppliers
- Main Laboratory services
- Mechanical, Electrical and Instrument Services

Headoffice Support services

- Purchasing
- Human Resources
- Corporate Services
- Call centre / Customer Services
- Public Affairs
- Information Technology
- Accounts
- Commercial
- Internal Audit
- Technical Services
- Business Analysis

4.3.3 Requirements that cannot be applied

None

5. MANAGEMENT RESPONSIBILITY / LEADERSHIP AND COMMITMENT

5.1 Management commitment

- 5.1.1 The SWSC Top Management is committed to demonstrating leadership and commitment with respect to the SHEms by;
 - a) Taking accountability for the effectiveness of the SHEms
 - b) Ensuring that the SHE policy and SHE objectives are established for the SHEms and are compatible with the context and strategic direction of the organisation
 - c) Ensuring the integration of the SHEms requirements into the organization's business processes;
 - d) ensuring that the resources needed for the SHEms are available;
 - e) communicating the importance of effective SHE management and of conforming to the SHEms requirements;
 - f) ensuring that the SHEms achieves its intended results;
 - g) engaging, directing and supporting persons to contribute to the effectiveness of the SHEms:
 - h) promoting continual improvement;
 - i) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

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Top Management takes accountability for the effectiveness of the SHEms by ensuring that objectives relating to the environment and occupational health and safety are set from top level. Through the Strategic Plan and annual business scorecard, annual SHE objectives are set at all levels of the organisation. Top Management takes a leading role by setting top-down SHE objectives and targets including the means and methods of performance measurement

Top Management has established a SHE policy to commit itself into meeting requirements of the SHEms. Resources are made available to meet our commitments to the SHEms Policy including finances (through the CAPEX and Recurrent Budgets), competent persons, machinery, equipment, infrastructure and maintenance of a conducive work environment.

5.2 SHE Policy

- 5.2.1 SWSC's top management has established a **SHE policy** in line with its strategic direction and the requirements of ISO 14001:2015 and OHSAS 18001:2007;
- a) is appropriate for the purpose and context of the organisation and supports its strategic direction;
- b) provides a framework for setting and reviewing SHE objectives;
- c) includes a commitment to satisfy applicable requirements;
- d) includes a commitment to environmental protection and reducing occupational injuries;
- e) Include SWSC's commitment to fulfil related compliance obligations
- f) Includes a commitment to continual improvement of the SHEms to enhance SHE performance

5.2.2 Communicating the SHE policy

The SHE policy established above is:

- a) available and maintained as documented information;
- b) communicated, understood and applied within the organization;
- c) available to relevant interested parties, as appropriate.

Top Management ensures that the SHE policy is <u>communicated at all levels</u> within the organisation. The policy has also been translated to the local language <u>(Siswati)</u> and is additionally displayed at all SWSC facilities so that external parties who visit the organisation can access and read its contents. <u>SHEQ inductions</u> are also used to communicate some key contents of the SHE policy. The SHE policy is periodically reviewed for its continuing suitability.

5.3 Organizational roles, responsibilities and authorities

Top management has assigned the responsibilities and authorities for relevant roles and these are communicated and understood within the organization.

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Top management has assigned the responsibilities and authorities for:

- a) ensuring that the SHE management system conforms to the requirements of the relevant International Standards (ISO 14001:2015 & OHSAS 18001:2007)
- b) reporting on the performance of the SHE management system and on opportunities for improvement, in particular to top management;

Roles, responsibilities and authorities are defined in <u>procedures</u> / work instructions, job profiles, process flows, strategic/change objectives as well as ad hoc assignments that may from time to time be decided on. Top Management ensures that these are communicated at all levels within the organization

SWSC Top Management has appointed the Internal Audit Manager as the SHEms top <u>management representative</u> to drive the development, documentation, maintenance and continual improvement of the SHEms. The management representative reports directly to the Top Management on the performance of the SHEms and any need for improvement.

SHEms implementation is done by line management, supported by the **SHEms** Coordinator (SHEQ Manager) and PIT (Project Implementation Team)

The Top Management has established a Project Management Team (PMT) to oversee, drive and direct the SHEms process.

The SHEms PMT consists of the following:

- MD
- Directors
- Head of Departments
- Internal Audit Manager
- SHEQ Manager
- SHEQ Officer
- SHEQ Compliance Officer

6. Planning

6.1.1 Actions to address risks and opportunities

When planning for the SHEms, the Corporation considered the issues referred to in 4.1 and the requirements referred to in 4.2 and determined the risks and opportunities that needed to be addressed, including the SHEms scope in order to:

- a. give assurance that the SHEms can achieve its intended result(s);
- b. enhance desirable effects:
- c. prevent, or reduce, undesired effects;
- d. achieve continual improvement.

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The organization has planned:

- a. actions to address these risks and opportunities;
- b. how to:
 - 1. integrate and implement the actions into its QMS processes
 - 2. evaluate the effectiveness of these actions.

The Corporation has developed an enterprise wide risk framework that aims to identify and assess risks and opportunities within various spheres of the organization. Business Risks and Opportunities are identified in the Corporation's SWSC Strategic Plan 2018-2021.

Opportunities arising from identified risks are explored in the form of SHE objectives and the business scorecard. SHE related risks are documented in the form of site specific risk and aspect registers whilst quality related risks are documented in Water Safety Plans. For adhoc activities, the corporation makes use of a documented risk assessment process to identify risks / aspects and implement controls to avert occupational injuries or impacts to the environment.

The Corporation has determined potential emergency situations that can have environmental impacts and cause occupational injuries through a <u>documented procedure</u>

6.1.2 **Environmental aspects (ISO 14001:2015)**

Within the scope of the EMS, the Corporation has determined the environmental aspects of its activities, products and services that it can control and those it can influence and their associated environmental impacts, considering a life cycle perspective.

The Corporation maintains documented information of its environmental impacts in the form of aspect registers for routine operations. For non-routine operations, the Corporation make use of the Environmental Assessment, Audit and Review
Regulations, 2010 to categorise each project and associated environmental impacts. Corresponding mitigation to these impacts are documented in the form of Comprehensive Mitigation Plans (CMPs) for each respective operation / project task. These CMPs consider a life cycle perspective since they look at both project implementation impacts as well as project post and operational impacts.

The Corporation also maintains a **documented procedure** for determining the <u>severity</u> of impacts, including significant impacts.

6.1.3 Compliance Obligations

The Corporation has determined compliance obligations in line with its operations and how they apply to our operations. These are documented in the **Legal register** for the entire organisation and for each site they have been identified and documented in the site specific <u>risk and aspect registers</u>. These compliances obligations are considered though-out all stages of the SHEms.

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Where local compliance obligations are inadequate to address the needs of SWSC, the leadership of SWSC adopts best practice compliance obligations as required. The **legal register** indicates which regional best practice standards are to be adopted by SWSC to direct its own operations

6.1.4 **Planning Action**

The Corporations has planned actions to address its significant aspects and opportunities through SHE objectives, business scorecard and strategic plan. Through these documents the corporation is able to develop management programmes including actions to be taken, responsible persons, resources needs as well as delivery timelines. Risks are assigned mitigations and controls for each site specific risk.

6.1 SHE objectives and planning to achieve them

The Corporation maintains documented information on the <u>SHE objectives</u>. These SHE objectives are consistent with our SHE policy, measurable, monitored, communicated and updated as appropriate.

When planning how to achieve its SHE objectives, we have determined:

- a. what will be done:
- b. what resources will be required;
- c. who will be responsible;
- d. when it will be completed;
- e. how the results will be evaluated.

Top Management ensures that measurable objectives and targets which are based on SHE performance are established and periodically reviewed. These objectives and targets are consistent with our SHE Policy and reflect our commitment to the reduction of occupational incidents and environmental impacts.

The objectives and targets are set annually and cascaded to all departments and levels of the organization and reviewed periodically against performance during the year in performance review sessions and management review meetings.

7. SUPPORT

7.1 Resources

7.1.1 General

The Corporation has determined and provided the resources needed for the establishment, implementation, maintenance and continual improvement of the SHEms. The organization considers:

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- a. the capabilities of, and constraints on, existing internal resources;
- b. what needs to be obtained from external providers.

The SWSC Top Management, with input from all responsible personnel, ensures that appropriate resources are determined and provided (budgeting) to implement, manage and improve an effective/efficient SHEMS and enhance its SHE performance. Financial resources are provided in the form of a re-current budget for routine activities and in the form of an annual capital expenditure budget for capital projects. Capital projects include major improvements in water treatment processes to ensure continued occupational safety and environmental compliance.

7.2 Competence

The Corporation:

- a) determines the necessary competence of person(s) doing work under its control that affects the performance and effectiveness of the SHEms;
- b) ensures that these persons are competent on the basis of appropriate education, training, or experience;
- c) Dertemines training needs associated with its environmental aspects and risks
- d) where applicable, takes actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken:
- e) retains appropriate documented information as evidence of competence.

The Corporation has a <u>Performance Management System (PMS)</u> in place whose secondary function is to identify competence related performance gaps. From this process, training needs are identified and forwarded to the Human Resources department for budgeting and approval. Training needs are also <u>identified</u> as part of risk assessments and process changes that require certain competencies. A <u>documented Training and Development procedure</u> is maintained by the corporation as well as a <u>Training and Development Policy</u>. Documented information is maintained as proof of competence.

7.3 Awareness

The Corporation ensures that persons doing work under its control are aware of:

- a. the SHE policy;
- b. significant aspects and significant risk and the potential impacts associated with their work;
- c. their contribution to the effectiveness of the SHEms, including the benefits of improved SHE performance;
- d. the implications of not conforming with the SHEms requirements, including not fulfilling compliance obligations.

The Corporation uses a number of awareness strategies that include SHEQ <u>induction</u> <u>programmes</u>, <u>monthly toolbox talks</u>, <u>Newsletters</u> and risk assessments. Additionally the Corporation's departments hold meetings as required where SHE issues are discussed into detail. <u>Documented information</u> is maintained as objective evidence for awareness conducted.

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7.4 Communication

The Corporation has determined the internal and external communications processes taking into account its compliance obligations. The Corporation's established communication processes include:

- a. on what it will communicate;
- b. when to communicate;
- c. with whom to communicate;
- d. how to communicate;
- e. who communicates.

The Public Affairs Department in consultation with other departments is responsible for external communication. Some of the determined communications are as follows:

Internal Communication

COMMUNICATION	FREQUENCY	TARGET AUDIENCE	MODE OF COMMUNICATION	RESPONSIBILITY
Memos	As required	All staff	Email Notice Boards	Human Resources
Emergency Communications	As required	Affected staff	Emergency Alarms Email Notice Boards	SHEQ Manager
Staff Inductions	As required	Affected staff	Presentations	Line Manager

External Communication

COMMUNICATION	FREQUENCY	TARGET	MODE OF	RESPONSIBILITY
		AUDIENCE	COMMUNICATION	
Customer	Weekly	SWSC Customers	Radio Programme	CSM
Education	Quarterly	SWSC Customers	Road Shows	CSM
Major service	As Required	SWSC	Print Media	PAM
Interruptions		Customers	Social Media	
			Radio	
Minor service	As Required	SWSC	Social Media	PAM
Interruptions		Customers		
Organisational	Annually	Interested Parties	Annual Report	PAM
SHE Performance				
Tariff Changes	Annually	SWSC Customers	Print Media	PAM
Environmental	As required	Interested and	Scoping Meetings	PAM/EHSM
impacts		affected parties		
Customer queries	Adhoc	Customers	24 Hour Call	CSM
			Centre	

A live **register of external communication** is maintained by the Public Affairs Department to record all external communications as required by the organisation's compliance obligations. Additionally a documented procedure is maintained for **Internal and External Communication**.

The Corporation continually communicates information relevant to the SHEms at various levels and functions of the organisation using internal communication platforms.

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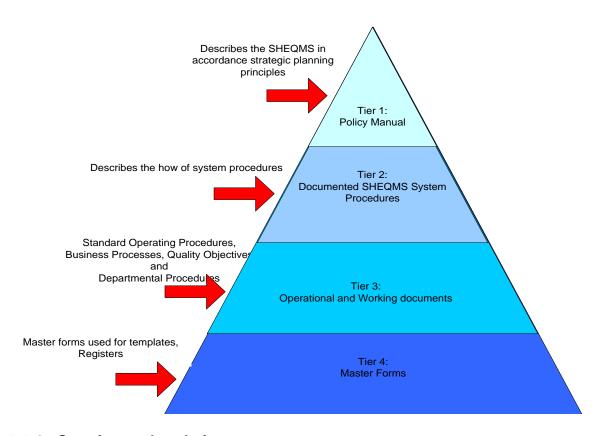
7.5 Documented Information

7.5.1 **General**

The Corporation's SHEms documentation includes:

- a) documented information required by ISO 14001:2015 and OHSAS 18001:2007;
- b) documented information determined by the organization as being necessary for the effectiveness of the SHEms.

The Corporation maintains a <u>documented procedure</u> to guide the creating, updating and control of documented information. The documented information is arranged in a 4 tier systems where policies and strategic documents are located in the 1st tier, procedures required to implement the SHEms are in the 2nd tier, departmental procedures and work instructions are in the 3rd tier whilst records, forms and registers are in the 4th tier.



7.5.2 Creating and updating

When creating and updating documented information, SWSC ensures appropriate:

- a) identification and description (e.g. a title, date, author, or reference number):
- b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic):
- c) review and approval for suitability and adequacy.

All documents that are created or updated are forwarded to the SHEQ office for vetting before the document is uploaded into the intranet document library. This is done to ensure that all document control requirements are met.

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7.5.3 Control of documented information

- 7.5.3.1 Documented information required by the SHEms and by ISO 14001:2015 and OHSAS 18001:2007 is controlled to ensure:
 - a) it is available and suitable for use, where and when it is needed;
 - b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).
- 7.5.3.2 For the control of documented information, the organization addresses the following activities as applicable;
 - a. distribution, access, retrieval and use;
 - b. storage and preservation, including preservation of legibility;
 - c. control of changes (e.g. version control);
 - d. retention and disposition.

Documented information of external origin determined by the organization to be necessary for the planning and operation of the SHEms has been identified as appropriate, and is controlled. (See <u>register of documents</u>)

Documented information retained as evidence of conformity and compliance is protected from unintended alterations.

The Corporation retains its documented information in the <u>intranet</u> and access is controlled by use of allocated security credentials to access documented information. A <u>register of documents</u> is also maintained which identifies both internal and external documents.

8. OPERATION / RISK MANAGEMENT

8.1 Operational Planning and control

Swaziland Water Services Corporation has developed, and maintains, a procedure for the management and control of SHE risks and impacts. All risks are managed in accordance with the hierarchy of risk controls, namely Elimination, Substitution, Engineering Controls, Administrative Controls and Personal Protective Equipment (PPE). A documented PPE policy guides prescription and allocation of PPE as required.

Where a hazard or aspect is assessed as having an intolerable risk and the associated process or activity cannot be eliminated, a detailed risk analysis is undertaken and measures implemented to manage the risk.

Where hazards are assessed as having very low levels of risk and the process or activity cannot be eliminated, reduced by substitution, or managed via engineering

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controls the methods of management of the risks will be through planning of those activities to ensure that they are carried out under specified conditions. Such conditions may comprise development, implementation, and monitoring of one or more of the following:

- <u>Standard Operating Procedures</u> where the absence of such could lead to deviations from SHE Policy and Objectives
- Job or task instructions
- Increased supervision
- Ensuring the competence of those involved
- Development of emergency and contingency management plans and processes

<u>Operational Procedures</u> have been established where appropriate in connection with goods and services relating to the achievement of SHE outcomes.

The Corporation conducts a <u>SHE induction</u> to providers of outsourced processes and services to make them aware of possible impacts of their activities to the organisation's SHEms. Suppliers of hazardous materials are required to provide detailed information on management of such materials, including emergency requirements, associated training and disposal methods to minimise environmental degradation. A <u>waste management procedure</u> is maintained by the Corporation to guide on proper waste collection, segregation, transportation and disposal.

Routine facilities inspection are conducted using the internal <u>SHE Audit Tool</u> to assess facilities operational compliance to SHE requirements and relevant <u>records</u> are maintained.

8.2 EMERGENCY PREPAREDNESS AND RESPONSE

Swaziland Water Services Corporation has established, and maintains a <u>procedure</u> for emergency organisation and response detailing the requirements for management of site emergencies and their impacts.

The organisation ensures that formal documented emergency preparedness and response plans are established to manage emergencies. These plans are communicated to all relevant personnel and include links to external emergency services (e.g. fire, ambulance, and police) with consideration of their response capability. Site plans include processes for preventing and mitigating illness and injury as well as environmental and community impacts. Possible emergency situations are listed in the relevant <u>procedure</u>.

Each site has personnel trained in emergency preparedness and these are responsible for periodically testing emergency response plans for each designated site. Records of emergency testing are maintained for each site of the Corporation.

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Emergency response plans are reviewed and revised where necessary, particularly after the occurrence of incidents or emergencies. The Corporation has also installed emergency and fire systems for its major plants as a proactive means to evacuate during emergencies.

The Corporation routinely communicate to external stakeholders and employees the identified emergency situations and evacuation means during site **SHEQ** inductions

9. PERFOMANCE EVALUATION

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

Key elements of our operations that affect SHEms performance are identified and monitored and measured, on a regular basis. Monitoring and measurement results are recorded and analysed to identify existing or emerging trends, and indicate progress towards the attainment of goals, objectives, and targets.

Swaziland Water Services Corporation has developed, and maintains procedures for monitoring and measurement of SHE performance including:

- Key characteristics of its SHE aspects and hazards.
- Compliance with relevant laws and other requirements.
- Objectives and targets.

The scoped organisation maintains a <u>register of relevant monitoring and measurement</u> requirements. The register specifies what is to be monitored / measured and why, who has responsibility, how monitoring / measurement is to be carried out, equipment to be used and its required calibration, and where monitoring results are analysed and evaluated.

The organisation has also identified those situations where employees' health monitoring is required and implements a **Medical Surveillance Programme** to manage the health implications of those situations. Employees have access to their own individual health records. Where legislation dictates, the health of employees exposed to specified hazards is monitored and recorded.

Waste management is monitored though a <u>documented procedure</u> considering the life cycle perspective of the waste generated. For identified hazardous waste, the Corporation make use of licensed <u>waste management specialist</u> to collect, transport and properly dispose-off waste. Records of such waste are maintained at each site of the organisation.

Due to emerging climate change impacts, the Corporation monitors water resources considering a life cycle perspective i.e. from the water catchment, up to the point the WARNING: Once downloaded or printed this document becomes an UNCONTROLLED COPY.

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water is supplied to the consumer. Additionally the Corporation operates waste water treatment plants which treat waste water so that the water can be returned to the environment to ensure sustainability of the natural resource. Water volumes and quality characteristics are monitored and measured at key identified point and related records are maintained. The Corporation also plays an active role in the <u>national climate change</u> mitigation and adaptation activities.

A Water Loss Reduction Programme is implemented by the Corporation to identify root causes of water losses and implement the relevant corrective and preventive actions to minimise water losses. The Corporation's core processes use power and energy hence we monitor usage of such and implement strategies to efficiently use energy resources.

9.1.2 Evaluation of Compliance / Legal and other requirements

Swaziland Water Services Corporation has established an appropriate SHE legal register and a register of other requirements that contains all the relevant compliance obligations and requirements applicable to the scoped organization as well as the other requirements relevant to the SHEms that SWSC adopted to inform its SHE operations and performance.

Regular updates to changing legislation and regulations will be obtained, recorded, communicated and implemented. Swaziland Water Services Corporation's own arrangements will be reviewed and revised where necessary to reflect changes to any applicable legislation. Changes to all own arrangements will be communicated.

Internal and/or external legal expertise will be utilized in the establishment, legal compliance auditing and regular updating of legal registers appropriate to the scoped organization as when the need arises.

SWSC maintains a <u>documented procedure</u> for evaluating its compliance obligations. The procedure states the frequency of evaluation and the organization take action as necessary where evaluation indicates noncompliance.

9.2 Internal audit

The Top management of the Swaziland Water Services Corporation periodically conducts internal audits at planned intervals to determine whether the SHEms:

- a) Conforms to the planned SHEms requirements and requirements of ISO 14001:2015 and OHSAS 18001:2007
- b) Is effectively implemented and maintained.

An <u>audit programme</u> is planned, taking into account the status and importance of the water treatment processes and areas to be audited, as well as the results of previous audits. This audit programme defines the audit criteria, scope, frequency and methods. The selection of auditors and manner in which audits are conducted ensures objectivity and impartiality of the audit process.

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A <u>documented procedure</u> has been established which outlines the responsibilities and requirements for planning and conducting audits, establishing records and reporting results. <u>Audit results are documented</u> and audit findings are communicated to relevant management and used as improvement areas to the performance of the SHEms.

9.3 Management review

Management Review meetings for the SHEMS are held at least once annually. The purpose of the Management Review is to assess the effectiveness and continuing suitability and adequacy of the SHEms. These reviews include assessing opportunities for Improvement and the need for changes to the SHEMS, including the SHE policy and SHE objectives. The management representative is responsible for scheduling and facilitating the management reviews as per the Management Review Procedure. Documented information is maintained as evidence for management review results.

10 IMPROVEMENT

Non conformity and corrective action

The corporation thrive to ensure that all environmental and occupational health deviations are timely reported and investigated. These include vehicle incidents, physical injuries, environmental pollution and degradation as well as property damages. The Corporation takes proactive action by ensuring that near misses are reported as well and proper preventive action taken.

A **documented procedure** has been established to define requirements for:

- a) Reviewing nonconformities
- b) Determining the causes of nonconformities;
- c) Evaluating the need for action to ensure that nonconformities do not recur;
- d) Determining and implementing action needed;
- e) Records of the results of action taken, and;
- f) Reviewing the effectiveness of the corrective action taken.

The Corporation implements an electronic system (Maximo) for the reporting and management of non-conformities and incidents. Records of non-conformities and associated corrective actions are maintained on the electronic system

Customer complaints relating to products and services are all channeled to our 24 hours call centre where an <u>electronic complaints management system</u> has been put in place for managing non conformities

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The Public Affairs Department has been setup to receive and channel accordingly public concerns on environmental impacts and issues of public health brought about by our activities.

When conducting investigation for incidents, the Corporation seeks to identify root causes of such incidents so that adequate corrective and preventive action is implemented.

Continual improvement

The Top management of Swaziland Water Services Corporation continually improves the effectiveness of the SHEms. Through the periodic Management Review Meetings, improvements areas are identified. Inputs to SWCS's continual improvement processes include review of the SHE policy, SHE objectives, audit results, strategic planning, analysis of data, corrective and preventive actions.

This is done to ensure that the SHEMS remains aligned to the strategic goals of the business and add value to the business by evident reduction of occupational health and environmental incidents.

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Table 1: CONTROL SHEET FOR AMENDMENTS

DATE	NATURE OF CHANGE	REVISION
Jan 2013	Amendment of Management Review to be bi-annually	01
Jan 2015	Re-writing of scope to be site and process specific	02
Dec 2016	Review policy manual for Integrated Management System.	03
April 2018	Incorporation of the requirements of ISO 14001:2015	04