

VOLUME 2

Occupational Health & Safety Specification

JW OPS 038/23 LEASE FOR NORTHERN FARM

Prepared by:	LESSEE:	
OHS Department	CEO (16.1	
PO Box 61542	APPOINTEE):	
Marshalltown	TELEPHONE	
2107	NUMBER:	
	FAX	
Tel: +27 11 688 1476	NUMBER	
	E-MAIL ADDRESS:	
	SIGNATURE:	

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 1 of 28

1.	OCCUPATION	ONAL HEALTH & SAFETY (OHS) SPECIFICATION
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23
	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

General Notification

This document forms an integral part of the Contract Specification and, in particular, shall constitute the Client's (Johannesburg Water SOC Ltd.) Occupational Health & Safety (OHS) Specification, as required by the Construction Regulations, 2014, as promulgated under the Occupational Health and Safety Act (Act no. 85 of 1993). The Specification shall furthermore be applied for the management of Mandatories performing activities for or on behalf of Johannesburg Water SOC Ltd, irrespective whether the contract work constitutes construction work or not.

The Contract Specification is contained in Volume 1 of the contract documents in Part 3: Scope of Work.

Acknowledgements

This Occupational Health & Safety (OHS) Specification was developed by the internal OHS Department for the sole use by Johannesburg Water SOC Ltd. The issue date of this OHS Specification is September 2016.

ITEM			Page no
1.	Introdu	uction	6
	1.1	JW's commitment to SHE management	6-7
	1.2	Scope of SHE specification	7
	1.3	Omissions	7
	1.4	Change management	7
2.	Overv	ew of contractor management	7
2.1	Contra	ctor management process	8
3.	SHE [Documentation	9
	3.1	Safety file	9
	3.2	Lessee appointment	9-10
	3.3	37.2 agreement	10-11
	3.4	SHE plan	11
	3.5	Legislative framework	11
	3.6	SHE Policy	11
	3.7	Appointments & competencies	11
	3.7.1	Appointment index	12
	3.8	Insurances	13
	3.9	Costing for SHE	13
	3.10	Sub-contractors	13
	3.11	Notification of construction work	13
	3.12	Construction work permit	14
4.	Organ	rganisational Structure / Organogram	
5.	Commitment to SHE		14
6.	HIRA		14-15
	6.1	Baseline risk assessment	16
	6.2	Issue based risk assessment	16

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 2 of 28



OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION

PROJECT NUMBER: JW OPS 038/23
PROJECT LOCATION: Northern Farm

PROJECT DESCR: Lease for Northern Farm

	6.3 Continuous risk assessment	16
	6.4 Safe work procedures	17
7.	Incident Management	17
	7.1 Reporting	17
	7.2 Investigation	18
	7.3 Close-out	18
	7.4 Lost time injury rate	18
8.	Medicals screening requirements	18-19
9.	Emergency management	18-20
10.	SHE Training	20-21
11.	PPE requirements	21
12.	Disciplinary processes	21
13.	Site rules	21
14.	Public health and safety	21
15.	Refusal to work	22
16.	Security on site	22
17.	Accommodation on site	22
18.	Welfare facilities	22-24
19.	Compliance monitoring	22
	19.1 Inspections	23
	19.2 Audits	23-24
	19.3 Work stoppages	24
	19.4 Non-compliance monitoring	25-41
20.	Operational Control	25-27
	20.1 Excavations	27-29
	20.2 Confined space entry	29-30
	20.3 Barricading	30
	20.4 Symbolic signage	30-31
	20.5 Use and storage of flammables	31-32
	20.6 Hazardous chemical substances	32
	20.7 Fire prevention and protection	32-33
	20.8 Stacking and storage	33
	20.9 Housekeeping	34
	20.10 Traffic management	34
	20.11 Hand tools	34-35
	20.12 Portable electrical equipment	35

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 3 of 28



OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION

PROJECT NUMBER: JW OPS 038/23
PROJECT LOCATION: Northern Farm

PROJECT DESCR: Lease for Northern Farm

20.13 Lifting equipment and machinery	35-38
21.14 Ladders	38-39
21.15 Construction vehicles and mobile plant	39
21.16 Fall protection	39-40
21.17 Structures	40
21.18 Explosive powered tools	40
21.19 Bulk mixing	41
21.20 Electrical installations	41-43
21.21 Demolition work	44
Monthly reporting	45
Project close out	
Sign off form	
	21.14 Ladders 21.15 Construction vehicles and mobile plant 21.16 Fall protection 21.17 Structures 21.18 Explosive powered tools 21.19 Bulk mixing 21.20 Electrical installations 21.21 Demolition work Monthly reporting Project close out

ABBREVIATIONS

Abbreviation	Description
CR	Construction Regulations
COID	Compensation for Occupational Injuries and Diseases
DoL	Department of Labour
GAR	General Administrative Regulations
GMR	General Machinery Regulations
GSR	General Safety Regulations
HCS	Hazardous Chemical Substances
HIRA	Hazard Identification and Risk Assessment
JW	Johannesburg Water (SOC) Ltd
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
PER	Pressure Equipment Regulations
SANS	South African National Standards
SABS	South African Bureau Standard
SHE	Safety, Health & Environment
SOC	State Owned Company

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 4 of 28



DEFINITIONS

Word / Phrase	Definition
"WCL 1", "WCL 2" and "WCL 22"	Means the prescribed forms for reporting of incidents and occupational diseases referred to in the Compensation for Occupational Injuries and Diseases Act.
Competent Person	A person who has in respect of the work or task to be performed the required knowledge, training, experience and, where applicable, qualifications specific to that work or task: provided that where appropriate, qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act 67 of 2000).
Construction work	 Any work in connection with: a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure b) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work
Contractor (inclusive of Lessee)	Any organization, person, entity performing activities for or on behalf of Johannesburg Water SOC Ltd.
Corrective Action	Action to eliminate the cause of a detected nonconformity or other undesirable situation.
Employee	Any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person
Employer	Any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him, but excludes a labour broker as defined in section I (1) of the Labour Relations Act, 1956 (Act No. 28 of 1956)
Hazard	Means a source of or exposure to danger.
Hazard identification	The identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed.
Incident	Means an incident as contemplated in section 24 (1) of the OHS Act 85 of 1993.
Machinery	means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to performing work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy
Mandatory	Includes an agent, a contractor or a subcontractor for work, but without derogating from his status in his own right as an employer or a user
Medical surveillance	Means a planned programme or periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner.
Method Statement	A document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment.
Lessee	Any employer who performs work and is appointed by the Client to be in overall control and management of the contract work (inclusive of Mandatories).
SHE File	A file or other record in permanent form, containing the information required as contemplated in the S.H.E Specification Document and legal requirements applicable to work activities.
SHE Plan	A documented plan which seeks to address all hazards identified means and ways to control and eliminate such to ensure compliance to the S.H.E Specification.
Workplace	Any physical location in which work related activities are performed under the control of the organization.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 5 of 28

OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION PROJECT NUMBER: JW OPS 038/23 PROJECT LOCATION: Northern Farm PROJECT DESCR: Lease for Northern Farm

1. Introduction

In terms of Section 37 of the Occupational Health and Safety Act (Act no. 85 of 1993), Johannesburg Water SOC Ltd is required to control persons/organizations conducting activities for or on their behalf (Mandatories) and the Construction Regulations promulgated under the Occupational Health and Safety Act (Act no. 85 of 1993), is requiring Johannesburg Water SOC) Ltd. to compile an occupational health and safety specification for any intended project classified as construction work and to provide the specification to prospective tenderers / Mandatories.

The dual objective of this specification is to ensure that the Mandatories and Lessees (herein after called Lessee (including Mandatories)) entering into a contractual agreement/relationship with Johannesburg Water SOC Ltd. achieves and maintains an acceptable level of occupational health, safety and environmental performance whilst conducting activities to perform the contract work.

This document forms an integral part of the Contract Specification and, in particular, shall be the OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION FOR THE INTENDED WORK / SERVICES. The Contract Specification is contained in Volume 1 of the contract documents. The principal and other contractors shall ensure that this specification is included with any contract/s that they may have with other contractors and/or suppliers that are engaged for the provision of labour, goods or services for this project. The Lessee and its Contractors shall furthermore implement any reasonable practicable means to ensure compliance to this Occupational Health & Safety (OHS) Specification and any other applicable legislation on their organization and/or activities performed by or for them. This OHS Specification will be read in conjunction, where issued and applicable, with the Environmental Specification issued for listed activities requiring environmental authorization by a relevant authority.

Compliance with this OHS specification does not absolve the Lessee from complying with any other applicable minimum legal requirement and the Lessee remains responsible for the sustainable integrity of the environment and the health and safety of its employees, mandatories as well as any persons affected by activities conducted for or on behalf of Johannesburg Water SOC Ltd (SOC) Ltd..

1.1 Johannesburg Water SOC Ltd's commitment to Occupational Health, Safety & Environmental (SHE) Management

Johannesburg Water SOC Ltd is committed to responsible occupational health, safety and environmental management. This commitment is essential to protect the environment, employees, Mandatories, visitors and provide a work environment conducive to health and safety. Lessees and their Contractors shall demonstrate their commitment and concern by:

- Ensuring that decisions and practices affecting occupational health, safety and environmental performance are consistent with the issued SHE specification;
- Ensuring adequate resources are made available for the effective implementation of occupational health, safety and environmental control and mitigation measures;
- Participating in hazard identification and risk assessments and design safety reviews;
- Communicating occupational health, safety and environmental management processes, strategies and control
 measures with all levels of employees, contractor and/or visitors;
- Ensuring visible leadership at all sites;
- Promoting and enforcing the use of correct types of Personal Protective Equipment (PPE);
- Reporting and investigation of incidents and accidents and ensuring actions are identified and implemented to prevent similar types of incidents reoccurring;
- Participating in Client audits and meetings and ensuring required actions are implemented within reasonable time frames on the site/project;
- Recognizing and commending safe work practices and coaching employees who require guidance;
- Applying and enforcing consequence management from deviations and transgressions of/from compliance to this SHE Specification noted and/or observed, where applicable;
- Carrying out safety observations, implement corrective and preventative actions and giving immediate feedback;

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 6 of 28

<i>1</i> .	OCCUPATIO	ONAL HEALTH & SAFETY (OHS) SPECIFICATION
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23
	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

Encouraging employee participation in the formulation of work instructions and safety rules.

1.2 Scope of Occupational Health, Safety and Environmental (SHE) Specification

The scope of this Occupational Health, Safety and Environmental (SHE) Specification is to address the reasonable and foreseeable aspects of occupational health, safety and environmental management, which will be affected by the contract work.

The specification will provide the requirements that the Lessee and other Contractors shall comply with in order to reduce the risks associated with the contract work, and that may lead to incidents causing injury and/or ill health or degradation of the environment, to a level as low as reasonably practicable and possible.

In particular, Johannesburg Water SOC Ltd will ensure that it shall not appoint any Lessee unless it is reasonably satisfied that the contractor which it intends to appoint has the necessary competencies and resources to carry out the work safely.

1.3 Omissions from SHE Specification

Where any omission from the SHE Specification is identified, applicable legal requirements will constitute the minimum standard for compliance to the relevant omission. The responsibility will be on the Lessee to provide assurance to Johannesburg Water SOC Ltd on compliance to the applicable legal requirements related to the activity / task / process.

1.4 Change management

Whenever Johannesburg Water SOC Ltd identifies the need to change or review the SHE Specification, approved changes and revisions will be communicated to the Lessee. A cost analysis on the implementation of the proposed changes / revisions will be calculated through a collaborative processes between Johannesburg Water SOC Ltd and the Lessee – where the approved changes and/or revisions has no cost implication for the Lessee the Lessee will be required to accept the approved changes / revisions and ensure implementation within the SHE Plan / File framework.

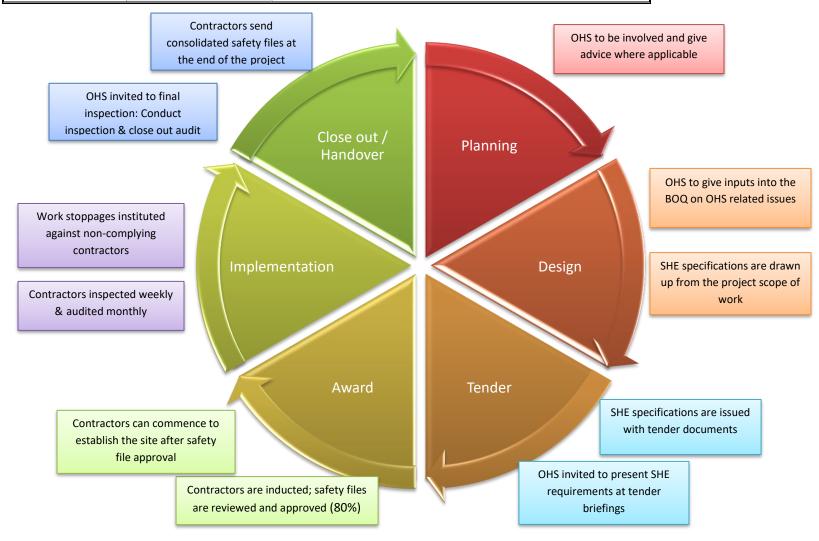
2 Overview of contractor management process

The contractor management process consists of the following phases:

- Tender briefing and tender documentation;
- Competency evaluation of Lessees (integrated into Supply Chain Management processes);
- Appointed contractor to attend SHE system induction;
- Preparation of SHE File by Lessee;
- Evaluation of SHE File;
- · Lessee engagement phase;
- Project close-out and submission of consolidated Health & Safety File.



OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION		
PROJECT NUMBER:	JW OPS 038/23	
PROJECT LOCATION:	Northern Farm	
PROJECT DESCR:	Lease for Northern Farm	



CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 8 of 28

1.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

2. SHE DOCUMENTATION

2.1 Safety file

The Lessee will prepare a SHE File containing the processes / procedures and templates to be applied during the project period for the scope of work. The Lessee will be evaluated during the contract period against the submitted SHE File.

At a minimum the Safety File will contain the following documentation:

- OHS Policy
- HIV/AIDS Policy
- Sexual Harassment Policy
- Smoking Policy
- Activities conducted
- Risk assessments
- Fire risk assessment
- SOP for activities
- Incident Management Procedure (reporting, investigation, management)
- Maintenance programme for machines and equipment used at the farm
- Personnel list (Lessee employees):
- Updated copy of the Occupational Health and Safety Act (Act no. 85 of 1993) and its Regulations; COID Act.
- Proof of valid registration and good standing with the Compensation Commissioner or another licensed Insurer;
- SHE Plan agreed with Johannesburg Water SOC Ltd.
- Approved risk assessments, review and monitoring plans and safe work procedures (method statements);
- A list of contractors (sub-contractors) including copies of the agreements between the parties and the type of work being done by each contractor;
- All written designations and appointments for project scope of work (CV and competency copies);
- · Induction training and site SHE rules;
- Occupational health and safety training matrix / plan;
- Arrangements with contractors and/or mandatories;
- Description of security measures;
- The following registers (as applicable to contract scope of work):
 - Accident and/or incident notifications, investigation & control register;
 - o Occupational health and safety representatives inspection register;
 - Template for entry into confined space;
 - Toolbox talks pro-forma;
 - Fall protection inspections template;
 - First-aid box content template;
 - Record of first-aid treatment template;
 - o Fire equipment inspection and maintenance template;
 - Ladder inspection template;
 - o Machine safety inspections template (including machine guards, lock-outs etcetera);
 - Inspection templates for lifting machines and –tackle (including daily inspections by drivers/operators);
 - o Inspection templates of machinery and equipment
 - Inspections templates of structures;
 - Templates of issuing of Personal Protective Equipment;
 - Monthly reporting and recording of statistics templates;
 - Keeping of any other record in terms of applicable legislation falling within the scope of SHE Legislation applicable to the project and the Lessee / Contractor's activities and organization.
- Emergency preparedness and response programmes;

2.2 Lessee appointment

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 9 of 28

<i>L</i> .	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

2.3 37.2 Agreement

- Johannesburg Water will enter into a 37(2) Agreement with all the appointed contractors
- A copy of the 37(2) Agreement must be kept in the SHE file of the contractor at all times.
- It is the responsibility of the contractor to ensure that there are 37(2) agreements between themselves and all their appointed sub-contractors.

2.4 Safety Plan

- The contractor shall prepare a SHE plan to address and manage all applicable sources of risk that are identified during the execution of the project. The SHE plan shall incorporate the requirements as listed in the SHE specification.
- A copy of the SHE plan shall be submitted together with SHE file for review and approval.
- It is the contractor responsibility to ensure they sub-contractor compiles a SHE plan that in line with the SHE specification requirement of Johannesburg Water.

2.5 Legislative framework

All contractors shall comply with legislation pertaining to this contract, including but not limited to:

- Constitution of the Republic of South Africa
- Occupational Health and Safety Act and its associated Regulations
- National Environmental Management Framework Legislation
- National Road Traffic Act
- Applicable South African National Standards (SANS)
- Compensation of Occupational Injuries and Diseases Act (COID)
- Local by-laws and provincial ordinances

2.6 SHE Policy

A SHE policy is a statement of intent and a commitment by the organization Chief Executive or Managing Director (OHS Act 16(1) appointee) in relation to requirements applicable to their Safety, Health and Environmental legal obligation, relevant SHE roles and responsibilities, and contractual obligations to the Client.

The contractor and their sub-contractor companies shall each have a documented SHE Policy authorized by their Chief Executive/Managing Director (OHS Act Section 16 (1) Appointee). The SHE Policy must meet the following minimum requirements;

- Organizational Mission and Goal.
- State the overall SHE objectives within the project.
- Show commitment to the prevention of injuries and ill-health.
- Show commitment to the protection of environment and the conservation of natural resources.
- Must be reviewed at predetermined intervals, or when there is change in work process, serious incident occurs.
- The SHE Policy must be in line with OHSAS 18001 and ISO 14001 requirements and guidance documentation. Must be authorized by contractor CEO.

2.7 Appointments and competencies

- The contractor and its appointed sub-contractor must make the relevant legislative and non-statutory appointments, which must be maintained valid for the entire contract duration.
- All appointees shall be suitably trained and certified competent for the responsibilities they are assigned for.
- Copies of all relevant appointments and the relevant competence certificates must be kept in the relevant SHE file.

2.8 Supervision of activities

• The Lessee shall ensure that the work is supervised by a competent Supervisor.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 10 of 28

1 .	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
	PROJECT LOCATION:	Northern Farm
Johannesburg Water	PROJECT DESCR:	Lease for Northern Farm

Appointment index

Appointment	Legislative Ref	Competency requirements (Min)
Health & Safety Officer	OHS Act Section 8(2)(h)(i) CR 8.5	Certificate + Experience
Supervisor	OHS Act Section 8(2)(i)	3 yrs relevant experience
Emergency, security and fire coordinator	CR 29	Certificate
Fall protection Planner / Supervisor	CR 10.1	Certificate
First-aiders	GSR 3	Certificate
Fire fighting equipment inspector	CR 29	Certificate
Incident investigator	GAR 9.2	Certificate
Risk assessor	CR 9.1	Certificate
Equipment inspector		Relevant training and experience

2.9 Insurances

- The Lessee and all his appointed contractors shall be registered with an appropriate compensation commissioner and have available a valid letter of good standing at all times.
- The obligation lies with the contractor to ensure that the Letter of Good Standing remains valid throughout the entire duration of the project.
- A copy of the said letter must be filed in all SHE files and made available during inspections and audits.

2.10 Costing for SHE

The contractor is responsible for ensuring that SHE costing is taken into consideration for the entire project/contract as this will ensure they comply with the SHE legislative requirements.

2.11 Sub-contractors

- Whenever the Lessee appoints contractors or sub-contractors, it is a requirement that an Occupational Health and Safety Act (Act no. 85 of 1993) Section 37(2) agreement (i.e. Agreement with Mandatory) is entered into between the Lessee and Contractors.
- The Lessee will ensure that all appointed contractors comply with the Johannesburg Water SOC Ltd SHE Specification requirements.
- The Lessee will establish a procedure on sub-contractor management and assurance on compliance to the established procedure will be provided to Johannesburg Water SOC Ltd on a monthly basis.
- Lessees are required to formally notify Johannesburg Water SOC Ltd before appointing subcontractors.
- Johannesburg Water SOC Ltd shall approve all specialist subcontractors to be appointed and/or engaged by the Lessee.

The Lessee shall:

- Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
- Appoint each contractor in writing for the part of the project on the construction site;
- Take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
- Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Lessee and any contractor, but at least once every 30 days;

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 11 of 28

7.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

- Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the Lessee's health and safety plan for the site or which poses a threat to the health and safety of persons;
- Include and make available a comprehensive and updated list of all the contractors on site accountable to the Lessee, the agreements between the parties and the type of work being done; and
- Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

2.12 Notification of construction work

Not applicable

2.13 Construction work permit

Not applicable

3. ORGANISATIONAL STRUCTURE

- The contractor shall develop and submit together with SHE file an organizational organogram related to the contractor, listing all the levels of responsibility from the Chief Executive down to the supervisor(s) responsible for the project.
- The organogram diagram must list all relevant positions, names of appointees and legal appointments.
- The contractor is responsible for updating the organogram timeously when there are changes to the appointments.
- All appointed sub-contractors are also required to compile their own organograms.

4. COMMITMENT TO SHE

- Visible commitment is essential to providing a safe working environment.
- Managers, supervisors and employees at all levels must demonstrate their commitment by being proactively involved in the day to day SHE operations.
- · Legislation requires that each employee takes reasonable care of themselves and their fellow workers

5. HIRA

Annexure 1: List of possible hazards emanating from projects and activities conducted for or on behalf of Johannesburg Water SOC Ltd includes an assessment of site specific health and safety hazards and risks and environmental aspects and impacts that have been identified by Johannesburg Water SOC Ltd as possibly applicable to the contract work for this project. It is by no means exhaustive and is offered as assistance to the tenderers and contractors.

Development of risk assessments

Every Contractor performing construction work shall, before the commencement of any construction work or work associated with the construction work, and during construction work, ensure that a risk assessment is undertaken by a competent person, appointed in writing, and the risk assessment shall form part of the SHE plan to be applied on the site. Risk assessments shall identify occupational health and safety hazards and risks and environmental aspects and impacts emanating from the activity to be performed by the Lessee / Contractor.

The risk assessment (inclusive of impact assessment) shall include (at a minimum):

- Identification of the relevant Johannesburg Water SOC Ltd Project with regard to JW Number, Project name and area:
- Date on which risk assessments were conducted / reviewed;
- The identification of the risks / hazards and aspects / impacts to which persons may be exposed to per activity;
- The analysis and evaluation of the risks / hazards and aspects / impacts identified;
- Existing control measures and proposed corrective measures;
- A plan to review the risk assessments as the work progresses and changes are introduced;

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 12 of 28

OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION PROJECT NUMBER: JW OPS 038/23 PROJECT LOCATION: Northern Farm PROJECT DESCR: Lease for Northern Farm

- Identification of significant risks (e.g. high; exceeding 75%);
- A documented plan of Safe Working Procedures (SWP)', and its relevance to the risk assessment, inclusive of method statements, to mitigate, reduce or control the risks and hazards that have been identified;
- A plan to monitor the application of the Safe Working Procedures (SWP);
- Signature of appointed competent person conducting risk assessment; and
- · Signature of approval by Lessee management and employees involved in risk assessment.

Based on the risk assessments, the Lessee must develop a set of site-specific occupational SHE rules that will be applied to regulate the health, safety and environmental hazards/aspects of the construction work.

The risk assessments, together with the site-specific occupational health and safety rules, must be submitted to Johannesburg Water SOC Ltd before mobilisation on site commences. These will be included in the SHE plan. The Contractor shall ensure through his risk management process the hierarchy of controls stipulated as follows, are implemented:

- Eliminate The complete elimination of the hazard.
- **Substitute** Replacing the material or process with a less hazardous one.
- **Redesign** Redesign the equipment or work process.
- Separate Isolating the hazard by guarding or enclosing it.
- Administrate Providing control such as training, procedures etc.
- **Personal Protective Equipment (PPE)** Use of appropriate and properly fitted PPE where other controls are not practical. (PPE as the last resort)

The Lessee will be required to carry out the following three forms of risk assessment:

- Baseline risk assessment;
- Issue based risk assessment;
- · Continuous risk assessments.

Baseline risk assessments

The Lessee is required to develop a baseline risk assessment taking the resources, competency levels, nature and scale of their organization into consideration for submission during SHE File evaluation phase. The hazards and risks to which persons, plant, vehicles and facilities may be exposed during the construction should be identified and evaluated. The aspects and impacts resulting in environmental pollution or degradation should also be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined and the baseline risk assessment prepared shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

Issue based risk assessments

The Contractor will be required to carry out separate risk assessments during construction of the project when methods and procedures are varied, for example when:

- Designs are amended;
- New machines are introduced;
- Plant is periodically cleaned and maintained;
- Plant is started-up or shut-down:
- Systems of work change or operations alter;
- Indents or near-misses occur; or
- Technological developments invalidate prior risk assessments.

Continuous risk assessments

The Occupational Health and Safety Act (Act no. 85 of 1993) specifically requires that employers shall provide and maintain working environments that are safe and without risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk free environment on an on-going basis. This is achieved by continuous risk assessments, a form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessments include:

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 13 of 28

OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION PROJECT NUMBER: JW OPS 038/23 PROJECT LOCATION: Northern Farm PROJECT DESCR: Lease for Northern Farm

- Maintaining general hazard awareness, and
- Pre-work risk assessments / Daily Safety Task Instructions.

Occupational health and safety risks or environmental impacts that are identified during the risk assessment process shall be communicated before the commencement of the said activity to every employee whose work is associated with the risk. Each employee shall sign to confirm understanding of the safety, health or environmental risks in the tasks.

Review of risk assessments

The Lessee is required to review the hazards identified, the risk assessments and the Safe Work Procedures as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and/or processes. Revisions to the approved risk assessments and Safe Work Procedures will be presented at each production planning and progress meeting.

Risk assessments are to be reviewed whenever there is change on the scope of work, process, and accidents or when required by Johannesburg Water SOC Ltd

The Lessee must provide Johannesburg Water SOC Ltd, other contractors and all other concerned or affected parties with copies of any changes, alterations or amendments to risk assessments and Safe Work Procedures within 14 days of such changes.

6. SAFE WORK PROCEDURES / METHOD STATEMENTS

Method statements or written safe work procedures shall be documented for all high risk activities:

- Design change or scope change/addition
- Change in job or task
- Introduction of new machinery, equipment or substance.

Method statements or written safe work procedures shall identify following:

- Tasks that are to be undertaken
- The hazards and associated risks of the task(s)
- The control measures for the task(s)
- The equipment and substances that are associated with task(s)
- Any training or qualification needed to do the task
- Personal protective equipment to be worn.

7. INCIDENT MANAGEMENT

7.1 Reporting of accidents and incidents

The Lessee must report all incidents where an employee is injured on duty to the extent that he:

- Dies
- Becomes unconscious
- Loses a limb or part of a limb
- Is injured or becomes ill to such a degree that he is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he was usually employed

Or where -

- A major incident occurred
- The health or safety of any person was endangered
- Where a dangerous substance was spilled
- The uncontrolled release of any substance under pressure took place
- · Machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- Machinery ran out of control

to Johannesburg Water SOC Ltd within two days and to the Provincial Director of the Department of Labour within seven days from date of incident (Section 24 of the Occupational Health and Safety Act (Act no. 85 of 1993) and

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 14 of 28

1 .	OCCUPATIO	ONAL HEALTH & SAFETY (OHS) SPECIFICATION
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23
	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

General Administrative Regulations), except that, where a person has died, has become unconscious for any reason or has lost a limb or part of a limb or may die or suffer a permanent physical defect, the incident must be reported to both Johannesburg Water SOC Ltd and the Provincial Director of the Department of Labour forthwith by telephone, telefax or e-mail.

- All other reports required by this specification must also be completed. Reporting of accidents / incidents to Johannesburg Water SOC Ltd will be on the prescribed format.
- The Lessee is required to provide Johannesburg Water SOC Ltd with copies of all statutory reports required in terms of the Occupational Health and Safety Act (Act no. 85 of 1993) within 7 days of the incident occurring.
- The Lessee is required to provide Johannesburg Water SOC Ltd with copies of all internal and external accident/incident investigation reports, within 7 days of the incident occurring.

7.2 Accident and incident investigation

- The Lessee is responsible for the investigation of all accidents and/or incidents where employees and nonemployees were injured to the extent that they had to receive medical treatment other than first aid.
- The results of the investigation are to be entered into the accident and/or incident register. The Lessee is responsible for the investigation of all incidents, including those described in Section 24 (1) (b) and (c) of the Occupational Health and Safety Act (Act no. 85 of 1993) and for keeping a record of the results of the investigations including the steps taken to prevent similar accidents in future.
- The Lessee is responsible for the investigation of all road traffic accidents, related to the construction activities, and for keeping a record of the results of the investigations including the steps taken to prevent similar accidents in future.
- Johannesburg Water SOC Ltd reserves the right to hold its own investigation into an incident or call for an independent external investigation.

7.3 Close out

- All incident investigation reports will be closed out once all the recommendations to prevent further incidents have been implemented.
- A copy of the investigation report must be handed to JW Safety Officer conducting the investigation.

8. MEDICAL SCREENING REQUIREMENTS

- The Lessee shall ensure that a medical surveillance programme is implemented for all employees.
- An initial health evaluation shall be carried out by an occupational health practitioner immediately, before after a person commences employment, where any exposure exists or may exist, which comprises:
 - o an evaluation of the employees medical and occupational history;
 - o a physical examination; and
 - o any other essential examination which in the opinion of the occupational health practitioner is desirable in order to enable the practitioner to do a proper evaluation.
- Medical surveillance and immunisation shall be done accredited at / by institutions or occupational health personnel, including, but not limited to:
 - Audiograms.
 - A cardio-respiratory examination / Lung function test;
 - Chest X-rays
 - Eye/ sight tests.
 - A general physical examination;
 - o A review of previous medical history.
 - Glucose levels
 - Blood pressure

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 15 of 28

7.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

- An entry medical certificate shall be obtained for all workers prior to commencing with site activities from approved medical institution. Copies of all medical certificates shall be retained in the SHE File prior to site establishment and before an employee is allowed to come onto site.
- Specific attention shall be given to the physical and psychological fitness of people who will be required to
 work in elevated positions and operators of mobile machinery.
- An exit medical certificate shall be obtained for all workers at the end of the contract and for all workers who leave the employment of the Contractor before the end of the Project. Copies of all exit medical certificates shall be submitted to the Johannesburg Water SOC Ltd Project Specialist or Appointed OHS Agent.

9 EMERGENCY MANAGEMENT

The Lessee must appoint a competent person to act as emergency controller and/or coordinator.

The Lessee must conduct an emergency identification exercise and establish what emergencies could possibly develop. He must then develop detailed contingency plans and emergency procedures, taking into account any emergency plan that Johannesburg Water SOC Ltd may have in place.

In the event where a contractor incorporates the services of a 3rd party service provider for the provision of Emergency Response Services, the following criteria must be met:

- Identification of 3rd party emergency response services (organization & contact details);
- Notification of contractor to 3rd party emergency response service of incorporation of services into contractor's emergency response plan (written agreement / signed letter).

The Lessee and the other contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarise employees with them.

First-aid

The Lessee must provide first-aid equipment (including a stretcher) and have qualified first-aider(s) on site as required by General Safety Regulations promulgated in terms of the Occupational Health and Safety Act (Act no. 85 of 1993).

The contingency plan of the Lessee must include arrangements for the speedy and timeous transporting of injured and/or ill person(s) to a medical facility or of getting emergency medical aid to person(s) who may require it.

The Lessee must have written arrangements in place with his other contractors regarding the responsibility of the other contractors towards their own injured and/or ill employees.

10 SHE TRAINING

All employees in jobs requiring training in terms of the Occupational Health and Safety Act (Act no 85 of 1993) and any other applicable legislative requirements are to be in possession of valid proof of training. Other occupational health, safety and environmental training requirements of the Occupational Health and Safety Act (Act no 85 of 1993) and Construction Regulations can include:

- General induction;
- · Site and job specific induction, including visitors;
- Occupational health and safety representatives;
- Training of the legal and nominated appointees;
- Operators of machinery and equipment
- · Basic fire prevention and protection;
- Basic first-aid;
- · Storekeeping methods and safe stacking; and
- Emergency planning and coordination
- Incident investigation
- Risk Assessment
- Planned job observations (supervisors)

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 16 of 28

<i>1</i> .	OCCUPATIO	ONAL HEALTH & SAFETY (OHS) SPECIFICATION
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

All operators, drivers and users of construction vehicles, mobile plant and other equipment are to be in possession of valid proof of training and, where applicable, valid licenses.

12.1 General Job training

The contractor is required to ensure that before an employee commences work their direct supervisor or line manager who is responsible for the employee has informed the employees of his scope of authority, hazards and risks associated with the work to be performed as well as the safety control measure(s). This will involve discussion in connection with ay work standard, job description or company policy or procedure.

12.2 Awareness and promotion

The Lessee is required to have a promotion and awareness programme in place to create an occupational health and safety culture within employees. The following are some of the methods that may be used:

- Toolbox talks:
- Posters:
- Videos:
- Competitions;
- Suggestion schemes;
- Participative employee activities such as "occupational health and safety circles".

The Lessee is, at a minimum, required to provide awareness programmes to employees on the following:

- General Health and Safety Awareness
- Environmental Awareness:
- HIV / AIDS awareness.

12.3 General competence requirement

The Lessee shall ensure that his personnel and other contractors' personnel are trained and competent to carry out work safely and without risk to health has been completed before work commences. The Lessee shall ensure that follow-up and refresher training is conducted as the work progresses and whenever the scope or nature of the work changes.

A "competent person" in relation to construction work, means any person having the knowledge, training and experience specific to the work or task being performed: Provided that where appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), these qualifications and training shall be deemed to be the required qualifications and training. It is the responsibility of the Contractor to determine whether any appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act.

Records of all training must be kept in the SHE File. The contents of the file will be audited from time to time.

At a minimum, the Lessee will provide training on Safe Work Procedures / Safe Operating Standards to personnel responsible for performing the related task. Records of training on Safe Work Procedures / Safe Operating Standards will be retained. Competence and skill levels by the employees responsible for performing the task on the implementation of the Safe Work Procedures / Safe Operating Standards will be measured through Planned Job Observations.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 17 of 28

1 2.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23
	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

12.4 Site-specific induction training

The Lessee will be required to develop a project specific induction-training course based on the baseline risk assessment for the contract work. He will ensure that all his employees and other contractors and their employees have received training on the submitted induction-training programme.

All employees of the principal and other contractors are to be in possession of proof (on person) that they have attended a site-specific occupational health and safety induction-training course.

No contractor shall allow or permit any employee, visitor or any other person to enter the site, unless such employee or person has undergone health, safety and environmental induction training pertaining to the hazards prevalent on the site at the time of entry.

Where the Lessee is required to operate within Johannesburg Water SOC Ltd Depot's the Lessee will ensure that all employees undergo the Johannesburg Water SOC Ltd induction.

11 PPE REQUIREMENTS

- The Lessee is required to continuously identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable take steps to protect workers and make it possible for them to work safely and without risk to health under the hazardous conditions.
- The Lessee will establish a Personal Protective Equipment Policy and a Personal Protective Equipment study
 will be conducted to determine the types of Personal Protective Equipment (PPE) to be supplied related to the
 hazards and risks emanating from the tasks.
- Cognisance shall be given to the gender of individuals required to where PPE; size required by the employee and size issued.
- Personal protective equipment should, however, be the last resort and there should always first be an attempt
 to apply engineering and other solutions to mitigating hazardous situations before the issuing of personal
 protective equipment is considered.
- Where it is not possible to create an absolutely safe and healthy workplace the Lessee is required to inform
 employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards
 being present and that allows them to work safely and without risk to health in the hazardous environment.
- It is a further requirement that the Lessee maintains the equipment, instructs and trains the employees in the use of the equipment and ensures that the employees use the prescribed equipment.
- Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear the prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed. An alternative solution has to be found that may include relocating the employee.
- The Lessee may not charge any fee for protective equipment prescribed by him but may charge for equipment under the following conditions:
 - Where the employee requests additional issue in excess of what is prescribed;
 - Where the employee has patently abused or neglected the equipment leading to early failure; and
 - Where the employee has lost the equipment.

All employees shall, as a minimum, be required to wear the following personal protective equipment on any of Johannesburg Water SOC Ltd's projects:

- Protective overalls;
- Safety boots;
- Dust masks

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 18 of 28

7.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

Fall protection equipment

•

All Personal Protective Equipment will clearly display the branding components of the Lessee's organization (e.g. Name of Organization, logo).

12 DISCIPLINARY PROCESSES

- The lessee is required to implement disciplinary process in order to enforce compliance with requirements.
- All sub-contractors are required to have the same.

13 SITE RULES

- The Lessee must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction.
- When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

14 PUBLIC HEALTH AND SAFETY

The Lessee is responsible for ensuring that non-employees affected by the activities are made aware of the dangers likely to arise from the site as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes:

- Non- employees entering the site for whatever reason;
- The surrounding community; and
- Passers-by the site.
- Patrons
- The Lessee shall organize the site in such a manner that pedestrians and vehicles can move safely and without risks to health, including sufficient and suitable traffic routes and safe walkways with relevant signage.
- Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that nonemployees are protected at all times.
- All non-employees entering the site must receive induction into the hazards and risks of the site and the control
 measures to be observed.

15 SECURITY

The Lessee must establish site access rules and implement and maintain these throughout the leasing period. Access control must, amongst other, include the rule that non-employees will have to follow and restricted areas.

The Lessee must develop a set of security rules and procedures and maintain these throughout the leasing period.

The Lessee shall:

• Supply an identification card containing the name, surname, employee number and photograph for all appointed employees (full or part time) for the site.

16 WELFARE FACILITIES

• The contractor must make provision for toilets and drinking water for personnel.

The contractor also needs to provide his employees with the following:

- Potable water for drinking;
- Water and soap for hand washing

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 19 of 28

7.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

Toilet paper

17 COMPLIANCE MONITORING

17.1 Inspections

- The lessee will be inspected at least once per week by the JW Safety Practitioner
- Feedback of the inspections will be issued immediately on work instructions, and a formal report sent within 7 days of conducting the inspection to all relevant stakeholders.
- Johannesburg Water SOC Ltd. reserves the right to conduct other ad-hoc assessments and inspections as deemed necessary.
- This may include, amongst other measures, site safety walks. Corrective actions will be identified by Johannesburg Water SOC Ltd. and the Lessee's representative and implemented by the Lessee (at no cost to Johannesburg Water SOC Ltd.) to ensure SHE Performance improvement.

17.2 Monthly audits

- Monthly audits will be conducted within periods not exceeding 30 days.
- The Lessee is to conduct his own monthly internal audits and inspections to verify compliance with his own occupational health and safety plan and management system as well as compliance with the requirements of the Johannesburg Water SOC Ltd. SHE Specification.
- The Lessee will also assess and inspect the compliance of contractors under its control. Management members of the Lessee will be involved in the internal assessments and inspections.

17.2.1 Monthly compliance rating

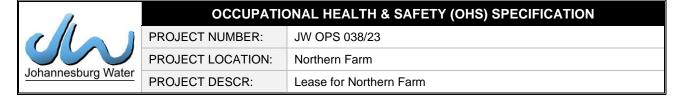
A monthly compliance rating will be calculated for each Lessee as per a formula determined by Johannesburg Water SOC Ltd focussing on or incorporating outcomes of assurance (e.g. monthly audit), operational (e.g. behavioural based safety inspection) assessments and other requirements, as necessary. Johannesburg Water SOC Ltd reserves the right to adjust the monthly compliance calculation formula as and when required – each revision of the monthly compliance calculation formula will be communicated to the Lessee before implementation.

Each Lessee is required to maintain a minimum compliance rating of 93% (Ninety Three Percent).

Scoring	Classification	Classification description
93% -100%	Good	Substantial compliance
80% -92%	Average	Compliance status needs to be improved
60% - 79%	Poor	Methods to ensure compliance require substantial improvement - operations with substantial non-compliance risks
<60%	Very poor	Methods to ensure compliance failed completely - troubled operation with severe non-compliance risks

17.3 Non-compliance management process

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 20 of 28



The following actions will be instituted where non-conformances are identified in terms of compliance to relevant legislative requirements and the Johannesburg Water SOC Ltd SHE Specification.

CRITERIA	ACTION TO BE INSTITUTED	RESPONSIBLE PARTY
Compliance rating: 93-100%	Non-conformance closure	Lessee / Lessee
Compliance rating: 80-92%	Letter of compliance improvement to Lessee	Johannesburg Water SOC Ltd
	Non-conformance closure	Lessee / Lessee
Compliance rating: 60-79%	Non-compliance hearing	Johannesburg Water SOC Ltd
	Letter of commitment for performance improvement	Lessee / Lessee
	Non-conformance closure	Lessee / Lessee
Compliance rating: <60%	Non-compliance hearing	Johannesburg Water SOC Ltd
	Letter of commitment for performance improvement	Lessee / Lessee
	Non-conformance closure	Lessee / Lessee
	Supply Chain Management to be informed of non-compliance standing	Johannesburg Water SOC Ltd
3 x Work stoppages	Non-compliance hearing	Johannesburg Water SOC Ltd
	Letter of commitment for performance improvement	Lessee / Lessee
	Non-conformance closure	Lessee / Lessee
	Supply Chain Management to be informed of non-compliance standing	Johannesburg Water SOC Ltd
3 x Non-conformance to <93%	Non-compliance hearing	Johannesburg Water SOC Ltd
monthly compliance rating	Letter of commitment for performance improvement	Lessee / Lessee
	Non-conformance closure	Lessee / Lessee
	Supply Chain Management to be informed of non-compliance standing	Johannesburg Water SOC Ltd
3 x consecutive repeat findings	Non-compliance hearing	Johannesburg Water SOC Ltd
	Letter of commitment for performance improvement	Lessee / Lessee
	Non-conformance closure	Lessee / Lessee
	Escalation to SCMU & CAPEX	Johannesburg Water SOC Ltd

18 OPERATIONAL REQUIREMENTS

21.1 EXCAVATIONS

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 21 of 28

<i>I</i> .	ONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

- Open excavations must be properly barricaded, and all non-employees must be kept away from such
 excavations.
- Construction works taking place at the farm must be conducted in a way that the health and safety of visitors to the site is not compromised.

21.2 CONFINED SPACE ENTRY

21.3 BARRICADING

- Barricading plans are to be presented by the Lessee for any major operations involving site works for approval
 by Johannesburg Water SOC Ltd. Where areas are unsafe, they should be enclosed with barricading.
 Examples are people working overhead, welding splatter etc.
- Where there is a risk of injury, the area should be barricaded off with secure solid barricades.
- Barricading for the prevention of access into areas with a potential risk of injury shall as a minimum be
 constructed of a handrail, knee-rail and appropriately supported as to prevent any person from falling into the
 restricted/risk area.
- Appropriate signage shall be affixed to the barricade indicating the risk associated (i.e. deep excavation, lifting operations etc.) and the responsible Supervisor and contact details shall be displayed. All barricading shall have a "No Entry" signs on all sides and at each change of direction. Signage shall be placed at 20 m intervals where lengths exceed. All signage shall be a minimum size of 290 mm x 290 mm.
- Danger tape shall not be utilised to prevent personnel from entering into areas.
- Where no risk exists of injury to personnel such as stacking and storage areas, the use of wire for hand and knee rails netting shall be acceptable to demarcate the area.
- All barricades will have a dedicated entrance where it is required that personnel enter the areas.
- Appropriate signage shall be placed at the entrance indicating which Lessee has right of entry.
- It is the Lessee's responsibility to remove all redundant barricades directly after use. The Lessee's Safety Officers will maintain a marked-up site plan indicating where barricades are erected.
- It will be a requirement that the lessee protects employees against contact with exposed rebar and poles by the installation of rebar-caps on all exposed areas where there is a potential that an employee could be injured.

21.4 SYMBOLIC SIGNGAGE

Lessees shall use mandatory and prescribed symbolic safety signs at their lay down and site areas. A notice shall be posted so as to warn against the re-closing of a switch of control gear whilst a person is working on such equipment.

- Emergency contact telephone numbers.
- Speed limit signs.
- Warning notices at openings through which people may fall.
- Risk based signage depending on the task being performed e.g.:
 - "Men working above", "Men working below', "Road closed detour", "Excavation in progress", "No walkway" etc.;

21.5 USE AND STORAGE OF FLAMMABLES

The lessee must ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions are taken;
- No flammable material is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for the purpose unless there is no danger of fire or explosion due to the application of adequate ventilation;
- The workplace is effectively ventilated. Where this cannot be achieved:
 - Employees must wear suitable respiratory equipment
 - No smoking or other source of ignition is allowed in the area

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 22 of 28

7.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION	
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

- The area is conspicuously demarcated as "flammable"
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with access control measures in place. Sufficient fire fighting equipment is installed and fire prevention methods practiced. Proper housekeeping may achieve this;
- Flammables stored in a permanent flammable store are stored so that no fire or explosion is caused.
- Stored in a locked and well-ventilated reasonably fire resistant container, cage or room conspicuously demarcated as "Flammable Store No Smoking or Naked Lights"
- The flammables store to be constructed of two-hour fire retardant walls and roof and separated from adjoining rooms or workplaces by means of a two-hour fire retardant fire wall
- Adequate and suitable fire fighting equipment installed around the flammables store and marked with the prescribed signs
- All electrical switches and fittings to be of a flameproof design
- Any work done with tools in a flammable store or work areas to be of a non-sparking nature
- No Class A combustibles such as paper, cardboard, wood, plastic, straw and the like to be stored together with flammables
- The flammable store to be designed and constructed such that in the event of spillage of liquids the store is able to contain the full quantity + 10% of the liquids stored
- A sign indicating the capacity of the store to be displayed on the door
- Only one day's quantity of flammable is to be kept in the workplace;
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas;
- · Metal containers to be bonded to earth whilst decanting to prevent build-up of static forces; and
- Welding and other flammable gases to be stored segregated according to the type of gas and empty and full cylinders.

21.6 HAZARDOUS CHEMICAL SUBSTANCES

The lessee must ensure that:

- Employees receive the necessary information and training to be able to use and store hazardous chemical substances safely;
- Employees obey lawful instructions regarding:
 - The wearing and use of protective equipment
 - The use and storage of hazardous chemical substances
 - o The prevention of the release of hazardous chemical substances
 - o The wearing of exposure monitoring and measuring equipment
 - o The cleaning up and disposal of materials containing hazardous chemical substances
 - O Housekeeping, personal hygiene and the protection of the environment
- The risk assessments required in terms of Construction Regulation include employee exposure to hazardous chemical substances and that the necessary measures be taken to protect persons from being detrimentally affected by hazardous chemical substances present or used in the workplace;
- Suppliers provide the necessary information in the form of a material safety data sheet regarding a hazardous chemical substances required to ensure the safe use and storage of that substances;
- An up-to-date list is kept on site of hazardous chemical substances stored and used together with the material safety data sheet of the hazardous chemical substances;
- Hazardous chemical substances containers be clearly marked with the contents and main hazardous category
 e.g. "Flammable" or "Corrosive" and the reference number of the hazardous chemical substances on the list
 indicated above;
- Hazardous chemical substances, for example asbestos dust, are not cleared by using compressed air but should be vacuumed;
- No person eats or drinks in a hazardous chemical substances workplace; and
- Hazardous chemical substances waste is disposed of safely in terms of hazardous waste disposal requirements.
- MSDS's to be in 16 point format- available on site

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 23 of 28

1.	OCCUPATION	ONAL HEALTH & SAFETY (OHS) SPECIFICATION
	PROJECT NUMBER:	JW OPS 038/23
Johannesburg Water	PROJECT LOCATION:	Northern Farm
	PROJECT DESCR:	Lease for Northern Farm

21.7 FIRE PREVENTION AND PROTECTION

The Lessee must ensure that:

- The risk of fire is avoided;
- Sufficient and suitable storage for flammables is provided;
- Sources of ignition are removed wherever flammable or highly combustible material is present in the workplace, for example:
 - Notices prohibiting smoking are displayed and enforced
 - Welding and flame cutting is only allowed under controlled conditions that includes written hot work permits
 - Only spark-free hand and power tools are used
 - No grinding, cutting and shaping of ferrous metals is allowed using electrically driven power tools that produce sparks
 - o Flameproof switches and fittings are to be used in the flammable atmosphere
 - o Good housekeeping is maintained to prevent the accumulation of unnecessary combustibles
 - Adequate ventilation is maintained
 - Adequate and suitable fixed and portable fire fighting equipment is provided and maintained in good working order.
- Maintenance must include:
 - Regular inspection of fire equipment by a competent person appointed in writing and keeping a register
 - Annual inspection and service by an accredited service provider
- All employees are instructed in the use of the fire fighting equipment and know how to attempt to extinguish a
 fire;
- A sufficient number of employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
- Employees are informed regarding emergency evacuation procedures and escape routes;
- Emergency escape routes are kept clear at all times and clearly marked;
- Evacuation assembly points are demarcated;
- Evacuation is practiced to ensure that all persons are evacuated timeously;
- Roll call is held after evacuation to account for all personnel and ensure that no-one has been left behind; and
- A siren or alarm is fitted which is clearly audible to all persons on site.

21.8STACKING AND STORAGE

The Lessee must ensure that:

- A competent person is appointed in writing to supervise all stacking and storage on a construction site;
- Adequate storage areas are provided and demarcated:
- The storage areas are kept neat and under control;
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack;
- The items in the lower layers can support the weight exerted by the top layers;
- Cartons and other containers that may become unstable due to wet conditions are kept dry;
- Pallets and containers are in good condition and no material is allowed to spill out;
- The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector has been obtained to build the stacks higher with the aid of a machine. The operator of the machine must be protected against items falling from overhead off the stack and no items may overhang;
- The articles that make up a single tier are consistently of the same size, shape and mass;
- Structures for supporting stacks are structurally sound and able to support the mass of the stack;
- No articles are removed from the bottom of the stack first but from the top tier first;
- Anybody climbing onto a stack must do it in a safe manner, taking reasonable safety precautions, and ensuring that the stack is stable and capable of supporting him or her
- Stacks that are in danger of collapsing are broken down and restacked;

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 24 of 28

1.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION		
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23	
	PROJECT LOCATION:	Northern Farm	
	PROJECT DESCR:	Lease for Northern Farm	

- Stability of stacks are not threatened by vehicles or other moving plant and machinery;
- Stacks are built in a header and stretcher fashion and that corners are securely bonded:
- Stacks are stepped back at least half the depth of a single container at least every fifth tier; and
- Persons climbing onto stacks do not approach unquarded moving machinery or electrical installations.
- Laydown area is allocated for Lessee-supplied items.
- At all times, the Lessee shall be responsible for the safe and adequate storage of all materials and equipment on site which he is to install, whether they are supplied by himself or others.
- The safe handling, unloading and loading of material receipts and dispatches at site or storage areas shall be the Lessees' responsibility.

The Lessee shall provide a suitable and adequate lock-up store for the storage of items of equipment and material, which would be damaged or pilfered if stored in the open. The Lessee shall provide all facilities required for weather-proofing, dust proofing or vermin proofing.

The Lessee is responsible for the proper storage and maintenance of all equipment until issue of the Certificate of Practical Completion.

All equipment and materials will be stored on suitable wood poles or pallets which will not protrude more than a meter from any of the stored material. Safe access ways shall be maintained between all stored items preventing employees from having to climb over or under equipment to retrieve the necessary.

21.9 HOUSEKEEPING

The Lessee to ensure that:

- Housekeeping is continuously implemented and maintained;
- Materials and equipment are properly stored;
- Scrap, waste and debris is removed regularly;
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow
 of pedestrians and vehicular traffic;
- Waste and debris not to be removed from heights by throwing but rather by chute or crane;
- Where practicable, construction sites are fenced off to prevent entry of unauthorised persons;
- Catch platforms or nets are erected over entry and exit ways or over places where persons are working to prevent them being struck by falling objects;
- An unimpeded work space is maintained for every employee;
- Every workplace is kept clean, orderly and free of tools, materials and the like that are not required for the work being done;
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skidfree and free of obstruction, waste and materials;
- The walls and roof of every indoors workplace sound and leak-free; and
- Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fenced, boarded
 over or provided with protection to prevent persons from falling.

21.10 TRAFFIC MANAGEMENT / IMPACT

- Traffic must be well controlled inside the farm.
- The lessee must ensure that the traffic going inside the farm and outside is well controlled such that it does not affect local traffic.
- Have designated people for controlling access inside the farm so that the traffic jams will be minimized.

21.11 HAND TOOLS

The Lessee must inspect all hand tools before it is brought onto the site.

As far as possible all hand tools must be numbered and placed on register to be inspected monthly by a
person designated to do so.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 25 of 28

Z.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION		
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23	
	PROJECT LOCATION:	Northern Farm	
	PROJECT DESCR:	Lease for Northern Farm	

- Any tools found to be in an unsafe condition must immediately be removed from service and either discarded or rectified.
- No chisels with "mushroomed" heads must be used.
- No hammer shall be used with a cracked or damaged handle.
- All files must be fitted with handles.
- All trolleys, pushcarts, etc. used on site must be identifiable, placed on register and inspected at least once
 every month.
- Non-sparking tools must be used in areas where the risk of fire or explosion is present.
- No homemade hand tools are allowed on the project.
- All tools shall be attached to a suitable lanyard when utilised in elevated positions

21.12 PORTABLE ELECTRICAL EQUIPMENT

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace for example; drills, saws, grindstones, portable lights, etcetera. Other electrical appliances such as fridges, hotplates, heaters, and etcetera must be inspected and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment shall be as follows:

- Periodical inspections must be carried out by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorised persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment must be worn or used whilst operating portable electrical tools and equipment.

This equipment:

- Must be maintained in good condition at all times to prevent an electrical shock to the user;
- The main power source should incorporate an earth leakage protection device or receive power through a
 double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

The following requirements apply to portable lights:

- Must be fitted with a robust non-hygroscopic non-conducting handle:
- Live metal parts or parts which may become live must be protected against contact;
- The lamp must be protected by a strong guard;
- · The cable lead-in must withstand rough handling;
- Inspections must be undertaken that concentrate on plug, cord, switch and any obvious faults;
- A register be kept for each piece of equipment with findings of regular inspections undertaken to evaluate the condition of these lights; and
- When used in wet/damp/metal container conditions, the lamp must be protected.

21.13 LIFTING EQUIPMENT & MACHINERY

Not applicable

21.14 LADDERS

The following requirements for ladders will apply:

- Inspect ladders to confined spaces prior to entry.
- Report any defects to JW

21.15 CONSTRUCTION VEHICLES AND MOBILE PLANT

The lessee is required to ensure that all vehicles are roadworthy and inspected on a daily basis.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 26 of 28

<i>1</i> .	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION		
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23	
	PROJECT LOCATION:	Northern Farm	
	PROJECT DESCR:	Lease for Northern Farm	

21.18 Fall protection (Working in elevated positions)

A pre-emptive risk assessment will be required for any work to be carried out above **two metres** from the ground or any floor level. This work will be classified as "work in elevated positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he is working at ground level. Whilst working in this position he shall be wearing a single belt with lanyard to prevent the person falling from the platform, ladder or other device. This safety belt will be, as far as is possible, secured to a point away from the edge over which the person might fall and the lanyard must be of such a length and strength that the person will not be able to move over the edge.

Alternatively, any platform, slab, deck or surface forming an edge over which a person may fall may be fitted with suitable guard rails at two different heights as prescribed in the relevant South African National Standard for the design, erection, use and inspection of access scaffolding.

Where the requirement in the paragraph above is not practicable, the person will be provided with a full body harness that will be worn at all times and shall be attached above the wearer's head at all times. The lanyard must be fitted with a shock-absorbing device or the person must be attached to a fall arrest system (anchorage connector; body wear; and connecting device) approved by Johannesburg Water SOC Ltd.

Where the requirements in the paragraph above are not practicable, a suitable catch net must be erected.

Employees working in elevated positions must be trained to work without risk to their health and safety or to the health and safety of others and be declared medically and psychologically fit to perform work at elevated positions. Where work on roofs is carried out, the risk assessment must take into account the possibility of persons falling through fragile material, i.e. skylights and openings in the roof.

21.19 Structures

Care should be taken to ensure that there is no damage to JW structures while executing the work.

22. Monthly reporting

- The Lessee is required to provide Johannesburg Water SOC Ltd. with a monthly report in the format provided on the last working day of the month.
- The report will include the monthly man-hours, incidents, training, inductions, audits, etc

23. Project close out

• Upon completion of the project, the lessee is required to hand over a consolidated project file to the Client with all the working documents for retention.

CLIENT SHE SPECIFICATION – JOHANNESBURG WATER SOC LTD	Page Number
VOLUME 2.4 – SEPTEMBER 2016	Page 27 of 28

1.	OCCUPATIONAL HEALTH & SAFETY (OHS) SPECIFICATION		
Johannesburg Water	PROJECT NUMBER:	JW OPS 038/23	
	PROJECT LOCATION:	Northern Farm	
	PROJECT DESCR:	Lease for Northern Farm	

Returnable Annexure A: Acknowledgement of SHE Specification & Annexures

LESSEE:	

I, the undersigned, hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and the consequences of non-compliance. The Lessee furthermore reiterates its commitment to compliance of the requirements contained within the following provided documentation:

- Johannesburg Water SOC Ltd, Safety, Health & Environmental (SHE) Specification, Volume 2;
- Annexure 1: List of possible hazards emanating from projects and activities conducted for or on behalf of Johannesburg Water SOC Ltd;

Signed at	. on this	Day	of	20
-----------	-----------	-----	----	----

CONTRACT MANAGER					
NAME	DEGIONATION	D.4.T.F.	OLOMATURE		
NAME	DESIGNATION	DATE	SIGNATURE		
	CONTRACT S	UPERVISOR			
NAME	DESIGNATION	DATE	SIGNATURE		
	WITNESS (1)				
NAME	DESIGNATION	DATE	SIGNATURE		
WITNESS (2)					
NAME	DESIGNATION	DATE	SIGNATURE		