



CNT RECORDS

Community :	SEDRA	Project/Phase :	00103 - Phase 3
From :	Branch of China Harbour Engineering Co Ltd.	To :	East Consulting Engineering Center
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DOCUMENTS ATTACHED					
SR.#	DOCUMENT NAME	REV	DESCRIPTION	NOTES/REMARKS	In PMWeb Viewer
1	00103_CHE_PLN_HSE_000003_230924_R00 HSSE Plan for Site Clearance and Earthworks (Phase 3,4 & 5).pdf	0	00103_CHE_PLN_HSE_000003_230924_R00 HSSE Plan for Site Clearance and Earthworks (Phase 3,4 & 5)		Comments Added

ENGINEER COMMENTS :

FINAL DOCUMENT STATUS :

A - Approved
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Submitted By:	Puneeth HS	Submission Date :	25-SEP-2023
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Workflow Comments Log

Step #	Role Name	Action Date	Action Time	Action By	Action Type	Team Input Names	Comments	Pending Team Input From
0		25-SEP-2023	9:47 AM	Puneeth HS (sedra345@chec.bj.cn)	Submit			
1	ECEC-DC4-SED345	25-SEP-2023	11:16 AM	Mohammad Ramiz (mohammad.ramiz@ecec.com.sa)	UserDelegate		QA Check	
0		26-SEP-2023	3:18 PM	Puneeth HS	--Pending--			
1	ECEC-DC4-SED345	26-SEP-2023	3:18 PM	Ayaz Ahmed Mirza (ayaz.ahmed@ecec.com.sa)	Return		Contractor should submit separate document for each phase	



Infrastructure works for Riyadh SEDRA 3,4 & 5 Projects

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HSSE Plan for Site Clearance and Earthworks



فرع شركة شاينا هاربور إنجنيرنج كمبني ليمتد
BRANCH OF CHINA HARBOUR ENGINEERING CO., LTD.
中国港湾工程有限责任公司沙特分公司

Infrastructure works for Riyadh

SEDRA 3 Project

00103-CHE-PLN-HSE-000003

Rev. 01

07 Nov 2023

HSSE Plan for Site Clearance and Earthworks

00	07 Nov 2023				Issued For Approval
Rev No.	Date	Prepared By	Reviewed By	Approved By	Remarks
Name	Asad Raza	He Hao Xiang	Liu Tao		
Position	HSE Manager	HSE. Department M	HSE. Director		



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Contents

1. Preamble	4
2. Scope of Work.....	4
3. Standards	6
4. Objectives	7
5. Introduction.....	9
6. Policy.....	10
7. Organization.....	14
8. Risk Assessment	22
9. Monitoring and Measuring Performance.....	30

1. Preamble

The purpose of plan is to develop a practical SMS (Safety Management System), as reference ROSHN Real State Sedra 3 Project, CSM (Construction Safety Manual) and any other applicable Saudi Standards & Policies and practices for the prevention and elimination of:

- 1) Injuries and health hazards
- 2) Damage to plant and equipment.
- 3) Negative environmental impacts and
- 4) To keep the general public safe

Sufficient information which will assist and enable all workers to work at minimal risk to themselves, fellow workers and the public. Line management with reliable information to successfully accomplish their health and safety obligations and responsibilities. A consistent approach to health and safety throughout the Department of Health and Social Services. The expectations for the use of the Safety Plan are for employees to:

- 1) Provide opportunities to know the health, safety and injury prevention information contained within the plan.
- 2) Implement and comply with Saudi Health and Safety practices and procedures; CSAR (Contractor Safety Administration Requirements), CSM (Construction Safety Manual), SMS (Safety Management System).
- 3) Provide input and feedback to improve the manual on an ongoing basis.

2. Scope of Work

The Contractor is responsible for the location of existing utilities and structures within or interfacing with their construction site and works. Where existing utilities and structures are present and/or interfacing with the proposed works, the contractor must

Avoid, Protect, Remove or Relocate the relevant utility or structure. The Contractor is responsible for all approvals by all authority or stakeholders to complete these works.

2.1 Civil/Earthwork

The scope of works is shown below but is not limited to:

- i. Site Preparation - Clearing and grubbing of the site clearance, removal of vegetation, debris, Rubbles etc.
- ii. Excavation works as per Topographical Survey -
 - Excavation
 - Backfilling
 - Disposal
 - Protection of existing building and property

2.2 Project Information

Project Title: Infrastructure Works for Riyadh SEDRA 3 Project

Location : North Eastern Side of Riyadh

Client : ROSHN Real Estate Company – KSA

Consultant: East Consulting Engineering Company -ECEC.

Contractor : Branch of China Harbour Engineering Company Limited

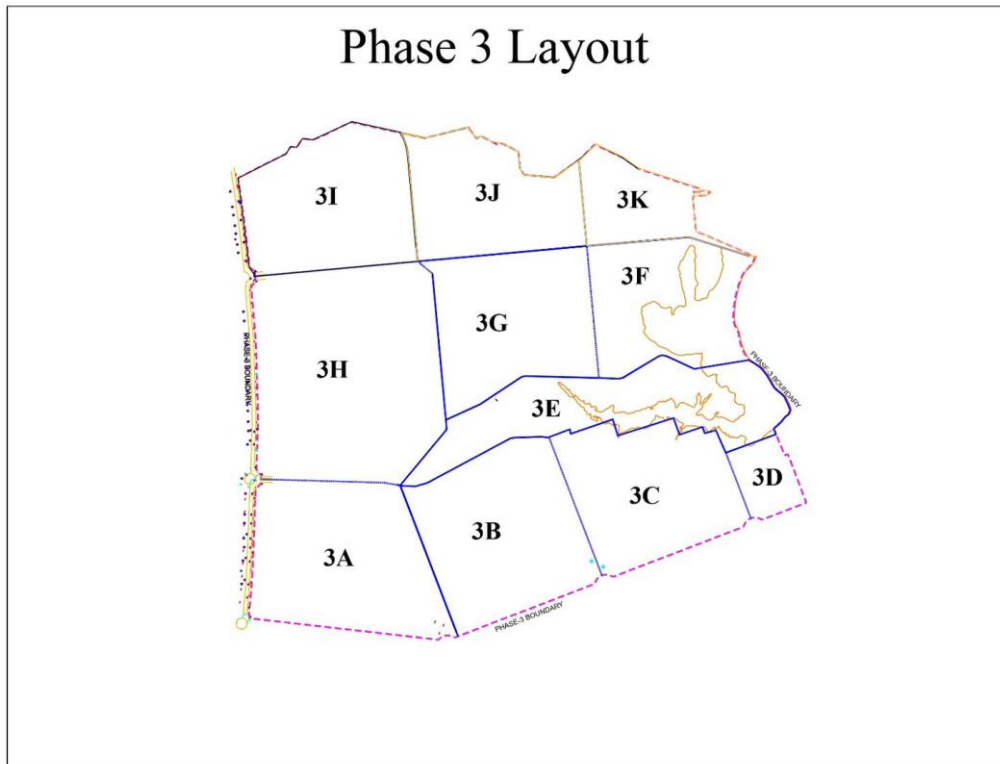


Figure 1. The Layout of PHASE 3 Project

3. Standards

Riyadh Township Master Plan Safety Management System - (RTMS SMS) Medical Minimum Standards Requirements Manual (MMSR Manual)

China Harbour Engineering Company Health, Safety & Environment (CHEC HSSE)

Plan Occupational Safety and Health Administration (OSHA) standards National Fire Protection Association:

NFPA 10, Portable Fire Extinguishers

NFPA 11, Low-, Medium-, and High-Expansion Foam NFPA 12, CO2 Extinguishing Systems

NFPA 12A, Holon 1301 Fire Extinguishing Systems NFPA 13, Installation of Sprinkler Systems

NFPA 14, Installation of Standpipe and Hose Systems NFPA 15, Water Spray Fixed Systems for Fire Protection

NFPA 16, Installation of Foam-Water Sprinkler and Foam-Water Spray Systems NFPA

17, Dry Chemical Extinguishing Systems

NFPA 17A, Wet Chemical Extinguishing Systems

NFPA 20, Installation of Stationary Pumps for Fire Protection NFPA 22, Water Tanks
for Private Fire Protection

NFPA 24, Installation of Private Fire Service Mains and Their Appurtenances

NFPA 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection

Systems NFPA 45, Standard for the Fire Protection for Laboratories using Chemicals

NFPA 70, National Electrical Code NFPA 72, National Fire Alarm Code

NFPA 75, Protection of Electronic Computer/Data Processing Equipment

NFPA 76, Recommended Practice for Fire Protection of Telecommunication Facilities

NFPA 80, Fire Doors and Fire Windows

NFPA 90A, Installation of Air-Conditioning and Ventilating Systems

NFPA 90B, Installation of Warm Air Heating and Air-Conditioning Systems NFPA 92A,
Smoke-Control Systems

NFPA 92B, Smoke Management System in Malls, Atria, and Large areas NFPA 101,
Life Safety Code

NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants

NFPA 1962, Care, Use, and Service Testing of Fire Hose Including Couplings and

Nozzles NFPA 2001, Clean Agent Fire Extinguishing Systems

4. Objectives

China Harbour Engineering Company (CHEC) will bridge to RTMP SMS, Construction Safety Manual (CSM), and any other applicable Saudi Standards & Policies.

CHEC shall join ROSHN Real State's Sedra Project Safe Life Program to effective reporting and communication with client representative on daily basis.

4.1 ZERO Accident Philosophy

4.1.1 Zero Accident goal

- The immediate identification and elimination of unsafe work practices and conditions in the workplace. (Daily observation report, site inspection etc.)
- No alcohol/drug
- No fighting/horseplay
- Smoking is only allowed in designated or approved areas only
- Mandatory PPE required for every site work force
- Ear protection
- Fall protection system
- Fire elimination

4.1.2 Common cause of accident

- Poor communication
- Taking shortcuts
- Negligence
- Did not follow safety procedures
- Did not use the required PPE
- Unfamiliar with the operations equipment/machinery

4.1.3 Commitment of site project team

- Site project manager is committed to support and follow the advice given by safety team.
- Participation in all required site safety activities.
- Weekly site walks through, site inspection.
- Training and meeting

5. Introduction

The China Harbour Engineering Company (CHEC) recognizes the importance of planning health, safety and welfare into the project at the earliest possible stage if injuries and ill health arising from the work activities are to be avoided. This Plan has been prepared as reference CSM (Construction Safety Manual), RTMP SMS (Safety Management System) to describe how the works will be managed, and controlled in order to protect, so far as is reasonably practicable, the health, safety and welfare of all personnel engaged on the project, and others who may be affected by their acts or omissions.

Plan to be effective, it is essential that the management and supervisory staff are familiar with and implement the relevant requirements of the plan. All management and supervisory personnel will therefore be provided with or have access to a controlled copy of the plan.

The CHEC will actively seek the support of all operatives engaged on the project to look after the health, safety and welfare of themselves and their colleagues by working within the spirit of this Plan.

Any person found to be disregarding the requirements of the plan will be subject to disciplinary action which may result in their dismissal from the project.

This plan shall also govern the activities performed by subcontractors. Subcontractors shall be monitored and where necessary shall be penalized, asset out above, or by other means deemed appropriate by the Project Manager.

The CHEC shall provide, so far as is reasonably practicable, training and instruction to the work force and shall ensure that access is permitted to all statutory authorities applicable to the project.

6. Policy

The Company Safety Policy Statement is reviewed regularly, and it will be translated into appropriate languages, so that it can be fully understood by all employees of CHEC and will be displayed in prominent positions throughout the site on notice boards and rest area walls.

Both the safety policy statement and the safety management systems will be reviewed by the HSSE Manager at regular intervals and in case of incident or changes to legislation.

The Project Manager and the Senior Managers will support the Health & Safety Policy by:

- Communicating their meaning to all levels of staff.
- Attending and chairing of the safety committee meetings.
- Carrying out safety inspections of their areas of responsibility.
- Ensuring that internal system audits are carried out their areas of responsibility.
- Establishing safety objectives.
- Ensuring an adequate reference library is maintained.
- Ensuring a review of changing legislation is carried out and necessary measures to comply are taken.
- Ensure a system for communicating with external bodies is established.

6.1 Smoke – Free Workplace Policy

Second-hand smoke, also known as Environmental Tobacco Smoke (ETS) or passive smoke is a cause of diseases including lung cancer and heart disease, in third parties. Neither the simple separation of smokers and non-smokers within the same airspace, nor the provision of ventilation, can eliminate exposure to second- hand smoke and the consequent health effects of such exposure. This policy has been developed to protect

all employees, services users, customers and visitors from exposure to second-hand smoke, to ensure compliance with legal obligations and to ensure a safe working environment.

6.2 Policy

It is our policy that all workplaces are smoke-free and that all employees have a right to work in a smoke-free environment. Smoking is prohibited by law throughout the workplace with no exceptions. This policy applies to all directors, management, employees, consultants, contractors, customers and visitors.

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Environmental Policy Statement

China Harbour Engineering Company Ltd (CHEC) recognises that its business activities may have a direct or indirect impact on the environment and as such we are committed ensuring such activities are undertaken in a manner sensitive to the environment by conserving natural resources, reducing waste and minimising pollution to land, water and air. To achieve this goal the company has established detailed procedures, documented in the Quality, Environmental and Health & Safety Manual, to give guidance to its employees. The objectives of these procedures are:

- To minimise negative effects of the company's activities on the environment
- To observe local legislation and other relevant requirements
- To ensure continued compliance with ISO14001: 2015
- To maintain a high standard of environmental protection on the company's work sites
- To provide training to employees to enable them to realise the company's environmental goals
- To set targets for achievement and improvement
- To monitor the effectiveness of the Environmental Management System
- To provide adequate resources and priority for the implementation of the policy

Mr Zhang Xiaoqiang is hereby appointed responsible for the overall co-ordination and implementation of this policy. Environmental consideration, however, remains a prime responsibility of every employee. All staff shall ensure this policy is understood, implemented and maintained. As an integral part of the company's aim to continually improve, this policy will be reviewed and updated annually.

环境政策声明

中国港湾工程有限责任公司 (CHEC) 认识到在作业过程中可能直接或间接的对环境造成影响, 因此我们承诺: 保证在进行此类操作时时刻注意保护环境及自然资源, 减少废物, 并把对土地、水、空气的污染减到最低限度。为了实现这一目标, 公司建立了详细的操作规程, 并体现在质量、环境、职业健康安全手册中, 供员工参照。该规程的目标为:

- 把对环境的负面影响控制在最低限度
- 遵守地方法规及相关要求
- 确保持续遵守 ISO14001: 2015 标准
- 在施工现场高标准的对环境进行保护
- 提供员工培训, 以确保其实现公司的环保目标
- 设定改进及成果目标
- 监控环境管理体系的有效性
- 提供适当的资源, 优先实施该政策

任命张晓强副总经理为此政策协调及实施的全权负责人。环境保护是每位员工的首要责任。所有人员应确保理解、贯彻、保持此政策。作为公司目标不可分割的一部分, 应不断改进, 重审更新。



Mr. Bai Yinshan
President

7th May 2022

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Health and Safety Policy Statement

This statement is a declaration that China Harbour Engineering Company Ltd (CHEC) is committed to ensuring that all its activities and operations are undertaken safely and with minimum harm to its employees, the environment and the general public. To achieve this goal the company has established detailed procedures, documented in the Quality, Environmental and Health & Safety Manual, to give guidance to its employees. The objectives of these procedures are:

- To prevent accidents
- To observe local legislation and other relevant requirements
- To ensure continued compliance with ISO 45001:2018
- To maintain a high stand of safety on the company's work sites
- To provide training to employees to enable them to realise the company's health and safety goals
- To set targets for achievement and improvement
- To monitor the effectiveness of the Healthy and Safety Management System
- To provide adequate resources and priority for the implementation of the policy

Mr Zhang Xiaoqiang is hereby appointed responsible for the overall co-ordination and implementation of this policy. Occupational health and safety, however, remains a prime responsibility of every employee. All staff shall ensure this policy is understood, implemented and maintained. As an integral part of the company's aim to continually improve, this policy will be reviewed and updated annually.

健康安全政策声明

此声明表明中国港湾工程有限责任公司的一切活动及操作都保证员工、环境、公众的安全，把危害控制在最低限度。为达成此目的，公司确立了详细的规程，并体现在质量、环境、职业健康安全手册中，供员工参照。该程序的目标为：

- 预防事故
- 遵守地方法规及相关要求
- 确保持续遵守 ISO 45001:2018 标准
- 保持公司施工现场的高度安全
- 提供员工培训，以确保其实现公司健康安全目标
- 监控健康安全管理系统的有效性
- 提供适当的资源，优先实施该政策

任命张晓强副总经理为此政策协调及实施的全权负责人。当然，职业健康安全是每位员工的第一要务。所有人员应保证理解、贯彻、保持此政策。作为公司目标不可分割的一部分，应不断改进，重审更新。



Mr. Bai Yinshan

President

7th May2022

Overall responsibility for the policy implementation rests with the occupier, manager or other person, for the time being, in charge of the workplace. All staff has an obligation to adhere to and facilitate the implementation of this policy.

The person in charge, Manager, shall inform existing employees, consultants and contractors, of the policy and their role in the implementation and monitoring of the policy. All new prospective employees, consultants and contractors shall be informed or given a copy of the policy on recruitment/induction by either the HSSE Manager or his representative.

7. Organization

7.1 Responsibilities

Chairman/Vice President/CEO/General Manager (Projects)

- The Chairman and Vice President (Projects) are responsible at executive level for the health, safety and welfare of all employees. Their commitment to this responsibility is enshrined in the statements set out in CHEC policy.
- The Health & Safety Manager have empowered by his management to stop their work and work related to the contract that they deem to be unsafe and take immediate corrective actions as needed.
- The HSSE manager is responsible for ensuring that the CHEC safety management system is established on each project and for the day to day monitoring and reporting required to enable the system to be effective.
- He shall advise Management of recommendations and necessary actions to achieve and maintain acceptable standards.
- He will be responsible for ensuring an effective safety department staff.
- He will ensure that relevant information from General and Physical Conditions inspections is promptly passed on to the Project Manager, Team Leaders and Section Foremen, in order to assist timely rectification of deficiencies.

- He will ensure that suitable and sufficient accident and incident data is collected, and that such information is properly recorded and analysed and communicated to Project Manager in order to better identify causes, trends and areas of concern.
- He shall ensure that health hazard monitoring requirements are properly and adequately reviewed, considering analysis of reports, necessary control action, follow up and calibration of monitoring equipment.
- He will arrange for proper induction & training to be given as it is required as per the worksite
- He will monitor that the Safety officer is maintaining a daily site diary, which shall comprehensively record all relevant matters concerning site safety.

Project Manager

- The Project Manager has overall responsibility for all health, safety and welfare matters on the project compliance with Saudi Arabian Government regulations and ROSHN requirements, including the adequacy of sanitation and first aid/medical facilities.
- He will ensure that all staff is empowered with the authority to take urgent and appropriate action to make the site safe and prevent unsafe working practices or other infringements of the safety plan or statutory regulations. This includes stopping work if continuing would constitute an unsafe act.
- The Project Manager has overall responsibility for all health, safety and welfare matters on the project, provision of adequate resources to meet the requirements and also compliance with Saudi Arabian Government regulations and requirements, including the adequate provision of welfare and first aid/medical

facilities, as defined in the ROSHN Real Estate's SEDRA Project-Phase3
Construction HSSE Plan

Engineers/Team Leaders/Supervisors

- They shall identify training needs for their sections ensure that these needs are communicated to the HSSE Department and will carry out daily Toolbox Talk.
- They shall ensure that all employees whether temporary or permanent has received the full Induction, Training and have had a full Orientation of all their work area prior to starting work.
- They shall ensure that Method Statements and Risk Assessments are produced, and relevant information is passed on to frontline workers by means of Task Briefings. The Task Briefings will be given on regular basis, while the work is on-going.
- They shall ensure that information and advice given on all health, safety and welfare issues are communicated through to the frontline worker.
- They shall ensure that, in addition to safety issues, health and welfare issues are also considered for each task or situation, and advice given to them is properly communicated to front line workers.
- They shall ensure that all hazardous materials in their areas of responsibility are recorded, and that all such materials are properly labelled and stored. Information given to them in the form of Material Safety Data Sheets (MSDS) must be communicated to workers charged with using, storing, transporting or disposing of such materials. This will be done in the form of a Toolbox Talk.

- They shall ensure all equipment, machinery and vehicles have been inspected and are in a safe working order.
- Teams Leaders/Supervisors will liaise with the Safety Department to ensure that suitable and sufficient Training material are provided.
- The Project Manager has overall responsibility for all health, safety and welfare matters on the project, provision of adequate resources to meet the requirements and also compliance with Saudi Arabian Government regulations and requirements, including the adequate provision of welfare and first aid/medical facilities, as defined in the ROSHN Real Estate's SEDRA Project-Phase 3 Construction HSSE Plan

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- They shall ensure all equipment, machinery and vehicles have been inspected and are in a safe working order.
- Teams Leaders/Supervisors will liaise with the Safety Department to ensure that suitable and sufficient Training material are provided.

Safety Supervisor

- Their duty will be to assist the Safety Officer (s) in carrying out his duties with particular reference to ensuring that workers conduct themselves in a manner which ensures their own health, safety and welfare, and that of others who may be affected by their acts or omissions.
- They will maintain daily records for inspection by the Safety Officer.
- Distribute safe working procedures and method statements to the relevant person's onsite. Monitor the safety equipment available onsite and re-order as necessary.
- Assist the Safety Officer in running safety campaigns, displaying safety signs and posters and organizing competitions.

- Assist the Safety Officer in preparing training courses and material, organizing and conducting induction training and specific safety training, and ensuring toolbox talks and Field Control Sheet briefings are properly given by designated personnel.
- They shall be responsible for the effective monitoring of hazardous substances is used, stored or handled onsite.
- They shall be responsible for the effective monitoring of noise levels on site through proper noise assessment surveys
- They shall be responsible for improving accident and incident investigations and reporting.
- They shall carryout regular Physical Conditions inspections to a consistent standard as directed by the Safety Officer or Health and Safety Manager.

Safety Officer

- He will be fully conversant with all local laws, regulations, codes of practice and guidance notes in relation to health, safety and welfare, and ensure that Management are made aware of any changes or amendments to such. He shall maintain a good working relationship with relevant official bodies.
- He will keep up to date with recommended methods of work and safe practices and circulate relevant information and literature to each level of employee. He will actively promote awareness of injury prevention and damage control to all levels of employees.
- He shall be experienced in the field of safety management and will report through the Health & Safety Manager.

- He will assist the Health & Safety Manager in supervising and monitoring the implementation of this Plan. He will advise Management on such issues as; •
Prevention of injuries and damage to plant and equipment
- Further improvement in existing safe working methods.
- Provision and use of adequate protective clothing and equipment.
- Site safety staff organization.
- Methods of safe working arising from new developments or technology.
- Conduct daily site safety inspection and will report all findings to the HSSE supervisor/HSSE Manager.
- He will ensure a daily site safety diary is maintained.
- He will assist with training for all levels of employee on safety.
- He will ensure that all daily and weekly equipment, machinery and vehicle inspection sheets are maintained.
- He will ensure that accident and incident information is properly recorded and reported, and that relevant information and data is collected or analysis.
- He will ensure that all weekly and monthly reports are properly prepared and passed to the Health and Safety Manager.

All Personnel and Sub-contractor's Employees

- Every person employed on the project has a statutory duty to take reasonable care for the health and safety of themselves and others who may be affected by their actions or omissions at work.

All employees in the workplace shall:

- Perform their work activities in the manner in which they have been instructed and trained such that they do not place themselves or anyone else at risk.

- Not attempt to carryout work of any dangerous nature nor perform any tasks, nor operate any equipment unless they have been correctly trained and authorized to do so, in accordance with recognized procedures.
- Report immediately ALL dangerous occurrences in accordance with the project procedures.
- Use the correct equipment for their work, ensuring that it is maintained in a safe condition and immediately report any known defects to their supervisor.
- Use the protective clothing and equipment provided for their safety and ensure that it is maintained in a safe condition. All queries on this matter must be directed towards their immediate supervisor.
- Report any unsafe conditions, incidents and near misses to their immediate supervisor so that remedial action can be taken to eliminate risk.
- Report any shortcomings in the instructed protection arrangements to their immediate supervisor as soon as these become apparent.
- Report all accident and personal injuries to their immediate supervisor and if necessary, receive medical attention.
- Use the main access ways as provided, comply with relevant safety notices and not enter any area where they may be placed at risk or do not have authorization to enter.
- Keep their workplace in a safe and tidy condition.
- Conform with the fire fighting and emergency procedures applicable to their place of work.
- Develop a personal concern for safety and if they have any doubt as to their ability to perform a task safely, they must inform their immediate supervisor.

- Shall not report for duty or enter the workplace having taken illegal substances (drugs) and alcohol.
- Will only use equipment and hand tools provided by the company and will not modify any equipment or hand tools.

8. Risk Assessment

8.1 Risk Assessment Process

The foreseeable hazardous operations associated with this project will be identified during the project risk assessment process as reference ROSHN Real Estate's SEDRA project-Phase 3 Risk Assessment and Management.

As an integral part of the project accident prevention program CHEC will implement arrangements to ensure that all operation & maintenance activities are considered for risk prior to the commencement of operations. The results of all completed risk assessments will be used to produce activity specific method statements and task briefings. The Health & Safety Manager will review these documents to ensure that the necessary mitigation measures are described to cover the identified risks.

The Risk Assessment Procedure shall be as follows:

- Identify the hazard.
- Evaluating the Risk (severity and likelihood).
- Looking at who may be harmed and how
- Implementing Control Measures.
- Recording the Findings.
- Monitoring and Reviewing the Assessment.

The Project Manager will ensure that project arrangements are developed, documented, established and maintained for:

- The training of staff in risk assessment techniques

- The identification and recording of risks.
- The effective management of any identified risks.
- The communication of identified risk, to all those recognized as being at risk.
- Obtaining risk assessments from subcontractors.
- Maintaining up to date records in a retrievable form.
- The co-operation of all subcontractors.



Risk evaluation shall cover a systematic examination of the likelihood and consequences to people, environment and property involved. Appropriate risk control measures shall then be developed to mitigate the risks.

Risk Matrix

Likelihood	Consequences				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Rare (1)	1	2	3	4	5
Possible (2)	2	4	6	8	10
Likely (3)	3	6	9	12	15
Often (4)	4	8	12	16	20
Frequent/ Almost Certain (5)	5	10	15	20	25
Consequence (C) X Likelihood (L)=Risk Level (RL)					
Risk Level					
15-25	Extreme Risk	Activity should not proceed in current form/ condition.			
8-12	High Risk	Activity should be modified to include remedial planning and action and be subject to detailed HSSE assessment.			
4-6	Moderate Risk	Activity can operate subject to management and modification.			
1-3	Low Risk	No immediate action required, unless escalation of risk is possible.			



Description	Likely Frequency		Probability
	Environment	Health and Safety	
Frequent	Continuous or will happen frequently	Occurs frequently	5
Often	5-12 times per year	Occurs several times per year	4
Likely	1-5 times per year	Has occurred more than once	3
Possible	Once every 5 years	Has occurred	2
Rare	Less than once every five years	Never occurred	1

00103-CHE-PLN-HSP-000004_R00_HSSE Plan for Site Clearance and Earthworks

TASK/OPERATIONAL STEPS	HAZARD DESCRIPTION	BASIC CAUSE OF HAZARD	INITIAL RISK RATING			Control Measures	RESIDUAL RISK RATING			Responsible Person
			L	C	R		L	C	R	
Site Clearance and Soilstock and backfilling	Operating mobile equipment & heavy vehicles and trucks.	<input type="checkbox"/> Minor injuries <input type="checkbox"/> Fractures. <input type="checkbox"/> Head injuries <input type="checkbox"/> Serious/Fatal Injuries <input type="checkbox"/> Overturning mobile equipment	5	4	E	<input type="checkbox"/> Provision of PTW for relevant activity duly signed by site engineer as a receiver and issued by client. <input type="checkbox"/> Provision of trained flagman. If a driver/operator doesn't see a flagman, he must stop immediately. At least one trained flagman will be assigned with each heavy equipment entering the site. Proper ramps to be provided for tippers to assure controlled tipper access to and egress from pits if applicable. The ramp slope shall not be exceeded more than 25 degrees angle. <input type="checkbox"/> The width of vehicle ramp will be not less than 10 meters. <input type="checkbox"/> Only one tipper to enter the pit area at a time – will be controlled by flagman stationed at the entrance/ramp. <input type="checkbox"/> All drivers to have a valid KSA driver's license and a certification of competence from third party for the type and size of the vehicle/equipment he is operating. <input type="checkbox"/> All equipment and heavy vehicles will have operational beacon <input type="checkbox"/>	3	2	M	CM

						<p>lights and reverse audio alarm</p> <ul style="list-style-type: none"> <input type="checkbox"/> Speed limit set at 20 km/h to control dust. In addition, water tankers will spray the area to assist in dust control. <input type="checkbox"/> No unauthorized personal shall be allowed to enter area. <input type="checkbox"/> Only authorized personnel shall be allowed to enter the site by foot, and it shall be from a separate entrance to avoid man and machine interface. <input type="checkbox"/> Additionally, all to wear basic PPE's including dust masks and eye protection, and most importantly 				
	Equipment and Vehicle movement & Man and Machine Interface	<ul style="list-style-type: none"> <input type="checkbox"/> Minor injuries <input type="checkbox"/> Fractures. <input type="checkbox"/> Head injuries <input type="checkbox"/> Serious/Fatal Injuries <input type="checkbox"/> Suffocation 	5	4	E	<ul style="list-style-type: none"> <input type="checkbox"/> Only trained and qualified operators with valid Third- Party Certification and KSA driving licenses <input type="checkbox"/> Seat belt to be worn all the times by operators. <input type="checkbox"/> Rollover protective structure to be in place. <input type="checkbox"/> Provide Safe access/ramps to dump trucks whilst loading/unloading the sand/soil. Use wheel chocks if loading <input type="checkbox"/> unloading the material is at a sloped area. <input type="checkbox"/> Personnel shall not be allowed to stay beside the vehicle (Dump Truck) during loading/unloading the soil/sand. <input type="checkbox"/> Vehicles to be kept away from reaching the excavation by trained flagman. <input type="checkbox"/> Supervisor and safety officer to assure no one is 	3	2	M	CM/ HSEM

						<ul style="list-style-type: none"> ● using mobile phone while working near or operating equipment. ● All equipment to be inspected by the operator on daily basis using specific checklist. ● All wheeled equipment to have flashing beacon lights and audio reverse alarm. ● No flagman, no operation of construction equipment. ● Supervisor to determine the site conditions for tippers (soil conditions, offloading sites) ● The distance of the plant from excavation edge to be determined by following geotechnical report. Operator / Driver to immediately stop if they cannot see flagmen. 				
Exposure to occupational noise and occupational vibration	<ul style="list-style-type: none"> ● Hearing Loss ● HAVS 	4	2	H	<ul style="list-style-type: none"> ● Use hearing protection when exposed to excessive noise levels (greater than 85 dBA). ● Rotate compaction tasks to minimize worker exposure to equipment vibration or grant a method suitable to reduce risk. 	2	2	M	CM/ PE/ SO	
Reptile Hazard	<ul style="list-style-type: none"> ● Snake bites, Post Sting Complications Paralysis Death 	5	3	E	<ul style="list-style-type: none"> ● Workers should take the following steps to prevent snakes and snake bite at work: ● Reduce rubbish and scrap materials where snakes can shelter. ● Minimize food sources for snakes by removing anything that may attract rodents or frogs. ● During high-risk times or after 	3	1	L	CM/ HSEM Supervisor / Workers	

						<p>holiday breaks, remind everyone of the increased risk of the presence of snakes.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wear gloves and boots when moving stored materials and rubbish as they will give some protection. 				
	PPE-Personal Protective Equipment	<ul style="list-style-type: none"> <input type="checkbox"/> Impact (falling/flying objects) <input type="checkbox"/> Penetration (sharp objects piercing foot/hand) <input type="checkbox"/> Skin burns by hot objects. 	3	3	H	<ul style="list-style-type: none"> <input type="checkbox"/> Everyone must wear appropriate PPE and additional PPE where required. <input type="checkbox"/> Task Engineer/ Supervisor must ensure that all workers are wearing appropriate PPE (Personal Protective Equipment). <input type="checkbox"/> Site Safety Officer must not allow anyone to enter or to work without wearing appropriate PPE (Personnel Protective Equipment). 	2	1	L	All

9. Monitoring and Measuring Performance

9.1 Monitoring and Review Planned Safety Inspections

A matrix of scheduled safety inspections will be established by the Health & Safety Manager for the different departments on the projects. The matrix will clearly identify individuals required to carry out safety.

inspections and the required frequency and record documents as reference ROSHN

Real State Sedra Project- Phase 3

Minimum inspection requirements area as follows:

- Safety Officer Daily
- Safety Supervisor Weekly
- Supervisors/Supervisor/Field Supervisor Weekly
- HSSE Manager Weekly
- Project Manager Monthly

Safety inspections shall be carried out independently of any other senior management function and at the frequency shown on the publicized matrix. An Engineer/Foreman or Charge-hands/Gangers should accompany the relevant Manager on his weekly inspections.

The overall purposes of Safety Inspections are to:

- Identify potential problems
- Identify equipment deficiencies
- Identify improper employee actions
- Demonstrate management commitment
- Prevent Accident/Incidents happening



9.2 Safety Inspections

A copy of all safety inspections report is to be sent to the Health & Safety Manager and to the relevant section personnel. The Health & Safety Manager will analysis all inspection reports and will publish a monthly report recording the level of compliance with inspection requirements.

The monthly report will record the level of close-out of inspection findings raised.

The monthly report will be used to identify any trends arising from the inspection program.

Reference Document Accordingly.

1. Mobilization Plan for Sedra3 Site Clearance and Earthworks
2. Logistic Plan for Sedra3 Site Clearance and Earthworks
3. ~~HSSE Plan for Sedra3 Site Clearance and Earthworks~~
4. Project Organization Chart for Sedra3 and Management Manpower Listing
5. Method Statement (MS) for Sedra3 Site Clearance
6. Method Statement (MS) for Sedra3 Earthworks
7. Method Statement (MS) for Sedra3 Foundation Treatment of Earthworks
8. Minutes of Meeting (MOM) of Sedra3 the first Project Site Meeting on
2023/03/26
9. Logistic Plan for Sedra3 Temporary Haul Access and General Layout Drawing
10. Site Survey Data and Investigation/Evaluation Report for Sedra3
11. Quality Assurance and Quality Control (QA/QC) Plan for Sedra3 Site Clearance and Earthworks

00103_CHE_PLN_HSE_000003_2023-11-07_R01_HSSE Plan for Site Clearance and Earthworks (Phase 3)