



**UNITED NATIONS OFFICE FOR PROJECT SERVICES**

**(UNOPS)**

**YEMEN EMERGENCY HUMAN CAPITAL PROJECT**

**(YEHCP)**

**COMPONENT 2**

**Supply and Installation of Solar Systems for Sewer Pumping Station in Al  
Teqaneyah/Al Mansourah in Aden**

**Environmental and Social Management Plan (ESMP)**

**21-JANUARY, 2024**

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## List of Abbreviation

AC	Air Condition
CE	European Union's (EU) mandatory conformity
DC	Direct Current
DCJB	DC Junction Box
DOD	Depth of Discharge
EHS	Environmental, Health and Safety
ESF	Environmental and Social Framework of the World Bank
ESHS	Environment, Social (including labor), Health, and Safety
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
ESSO	Environmental and Social Safeguard Officer
FMFA	Financial Management Framework Agreement
FCV	Fragility, Conflict and Violence
GARWSP	General Authority for Rural Water Supply Projects
GBV	Gender Based Violence
GHS	General Health and Safety guidelines
GIIP	Good International Industry Practice
GM	Grievance Mechanism
GRM	Grievance Redress Mechanism
GSM	Global System for Mobile Communication
HFs	Health Facilities.
HIAB	Hydrauliska Industri AB
HSSE	Health, Safety, Social and Environment
IDA	International Development Association
IDP	Internally Displaced Person
LCD	Liquid Crystal Display

LED	Light Emitting Diode
LMP	Labor Management Procedures
MCB	Miniature Circuit Breakers
MCCB	Molded Case Circuit Breaker
NWSA	National Water and Sanitation Authority
MPPT	Maximum Power Point Tracking
PAP	Project Affected People
PV	Photovoltaic
PVC	Permanent virtual circuit
RF	Resettlement Framework
ROY	Republic of Yemen
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SEP	Stakeholder Engagement Plan
SMP	Security Management Plan
SPD	Surge Protector Device
TPM	Third Party Monitoring
TUV	Technischer Überwachungsverein (Association for Technical Inspection)
UL	Underwriters' Laboratories
UNOPS	United Nations Office for Project Services
UWS-PMU	Urban Water & Sanitation- Project Management Unit
UV	Ultraviolet
XLPE	Cross linked polyethylene cable.
YIUSEP II	Second Yemen Integrated Urban Services Emergency Project
YEHCP	Yemen Emergency Human Capital Project
WSLC	Water and Sanitation Local Corporation
WWTPs	Waste Water Treatment Plants

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## Summary Sheet

<b>Sub-Project Name</b>	Supply, Installation and Operation of Solar PV Energy for Sewer Pumping Station in Al-Teqaneyah/ Al Mansoorah in Aden ( (YEHCP)E HC-WS-ADN-4
<b>Sub-Project Location</b>	Aden
<b>Implementing Partner</b>	UWS-PMU – Aden
<b>Risk level</b>	Moderate
<b>Date of the field visit</b>	April- June 2022
<b>Observations/Comments:</b>	Indicated below.
<b>Signature of ESSO:</b>	
<b>Date:</b>	

### 1. Introduction

This Environmental and Social Management Plan (ESMP) was prepared based on UNOPS updated Environmental and Social Management Framework (ESMF) of the Yemen Emergency Human Capital Project (YEHCP), to address the potential environmental and social impacts, which may be triggered during the implementation of the sub-project to meet the requirements of the World Bank's Environmental and Social Framework (ESF), as well as national environmental laws and regulations, for the Yemen Emergency Human Capital Project (YEHCP-Component 2).

This sub-project's ESMP was built based on principles and objectives spelt out in the updated ESMF prepared for the additional Financing of the YEHCP.

Specific to YEHCP-Component 2, UNOPS has in parallel prepared a Labor Management Procedures (LMP) to meet the requirements of ESS2, and a GBV/SEA/SH Plan and a Security Management Plan (SMP) to meet the requirements of ESS4, and a Resettlement Framework (RF) to meet the requirements of ESS5, as well as a Stakeholder Engagement Plan (SEP) which is prepared jointly by UNOPS, WHO, and UNICEF, to meet the requirements of ESS10. All the above-mentioned documents have been updated to be part of the additional financing to the parent project. RF was prepared for the parent project, however, ESS5 it is not relevant for this subproject.

Updated YEHCP ESMF link:

<https://documents1.worldbank.org/curated/en/099535005302223184/pdf/P17657004944f30b0b3c005bafa0859d1b.pdf>

Updated YEHCP SEP Link:

<http://documents.worldbank.org/curated/en/740571632338239349/pdf/Stakeholder-Engagement-Plan-SEP-Yemen-Emergency-Human-Capital-Project-P176570.pdf>

## Background

Violent conflict, now in its seventh year, has crippled Yemen's economy and created an unprecedented humanitarian crisis. Yemen has been embroiled in conflict, inflicting considerable physical damage to infrastructure, ravaging its economy, weakening institutions, and protracting what has already been the world's worst humanitarian crisis in a long time. According to the United Nations Development Program (UNDP)'s estimates, there were 102,000 direct combat deaths and 131,000 indirect deaths due to lack of food, health services and infrastructure, and many more injuries between 2015 and 2019<sup>1</sup>. Diverse factors including tribal, regional, and sectarian divisions, long-standing grievances, elite capture of limited resources and rampant corruption have been the major causes of fragility drivers operating across Yemen. While conflict has been a key factor in the gradual breakdown of national structures essentially crippling service delivery, particularly in life-critical sectors such as health, violence alone cannot account for the magnitude of suffering with other factors like fragmentation, poor coordination, limited transparency, and weak governance further complicating the picture on the ground.<sup>2</sup>

Yemen, a country located in a dry and semi-arid region, is already facing a severe water crisis in which several major cities are running out of water. Mostly due to high population growth, misguided agricultural development, traditional irrigation practices and type of cropping patterns, a lack of law enforcement to regulate water use, and vulnerability to climate change, the crisis may soon reach catastrophic levels. Yemen's acute water scarcity poses a serious threat to the country's stability and security. While the past six years of conflict cannot be attributed solely to water shortage, it is an important contributor. Studies reveal that water scarcity acts as a security threat multiplier in regions characterized by a growing population, social and political tensions, as well as ineffective and unaccountable state institutions – such as in Yemen. The recent impacts of climate change and armed conflict on the country's dwindling water resources create a new urgency to address this old problem.

The country has suffered extensive damage to its human capital which will require time and steady resources to undo. A large swathe of the population is food insecure, and over two million children require treatment for acute malnutrition,<sup>3</sup> causing irreparable damage to human capital. About 4.5 million children have been born in Yemen since the escalation of violence in March 2015. An estimated 4.3 million people have fled their homes since the start of the conflict, of which over 3 million remain internally displaced with the numbers rising. The conflict has further limited already fewer opportunities open to women to access economic activities with their mobility and participation in the public domain further curtailed, while a climate of intensified gender-based violence, increased rates of child marriage, and reduced educational opportunities remain pervasive. At the same time, the

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<sup>1</sup> Moyer J, et al. 2019, Assessing the Impact of Conflict on Human Development in Yemen, UNDP.  
<https://www.undp.org/content/dam/yemen/General/Docs/ImpactOfWarOnDevelopmentInYemen.pdf> (accessed 11/23/20)

<sup>2</sup> AlKarim T, et al. BMJ Global Health 2021; 6:e004740. doi:10.1136/bmjgh-2020-004740

<sup>3</sup> Integrated Food Security Phase Classification 2020/2021 analysis for acute malnutrition

[https://www-test.undp.org/afghanistan/publications/integrated-food-security-phase-classification-ipc?utm\\_source=EN&utm\\_medium=GSR&utm\\_content=US\\_UNDP\\_PaidSearch\\_Brand\\_English&utm\\_campaign=CENTRAL&c\\_src=CENTRAL&c\\_src2=GSR&gclid=CjwKCAjwp9qZBhBkEiwAsYFsb6yagKIs2FVeFGH0Stij\\_P\\_S0ldMOALIHwFF9RopiOzwR3KKptCrahoCz70QAvD\\_BwE](https://www-test.undp.org/afghanistan/publications/integrated-food-security-phase-classification-ipc?utm_source=EN&utm_medium=GSR&utm_content=US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src=CENTRAL&c_src2=GSR&gclid=CjwKCAjwp9qZBhBkEiwAsYFsb6yagKIs2FVeFGH0Stij_P_S0ldMOALIHwFF9RopiOzwR3KKptCrahoCz70QAvD_BwE)



operating environment for aid delivery is highly constrained, further complicating operational conditions for international agencies on the ground.

With over 24 million people food insecure, including a staggering 16.2 million people in Integrated Food Security Phase Classification (IPC) Phase 3+ requiring urgent emergency assistance, food insecurity in Yemen is deep-rooted. Hunger, food insecurity and malnutrition are among the most pressing and overwhelming challenges faced by the country at present, at a scale that is not being fully met by national authorities and the international development and humanitarian communities. The high dependence on food imports, for most households combined with high food prices and significantly reduced income earning has resulted in low food access.

Socio-economic conditions deteriorated further in 2020, leading to a significant worsening of poverty. Distortions created by the fragmentation of institutional capacity and the divergent policy decisions between the areas of control have further compounded the economic and humanitarian crisis.

## Project Description (YEHCP)

The World Bank is financing the Yemen Emergency Human Capital Project (YEHCP- P176570), under the provisions of World Bank OP 10.00, paragraph 12, *Projects in Situations of Urgent Need of Assistance or Capacity Constraints*. The Project will be implemented by the United Nations Office for Project Services (UNOPS), the World Health Organization (WHO), and the United Nations Children's Fund (UNICEF) in which UNOPS will implement Component 2 of the project, in partnership with local Implementing Partners.

The overall objective of YEHCP is to provide essential health, nutrition, water, and sanitation services to the population of Yemen.

## Project Components (1 and 2)

The Project has four components as follows:

- **Component 1. Improving Access to Healthcare, Nutrition, and Public Health Services:** 1.1: Improving Access to the Minimum Service Package (MSP) at Primary Health Care Level (implemented by UNICEF); 1.2: Preventing Chronic Malnutrition and Treating Acute Malnutrition at the Community and Primary Level (implemented by UNICEF); 1.3: Supporting Health and Nutrition Services at the First Level Referral Centers (implemented by WHO); 1.4: Sustaining the National Health System Preparedness and Public Health Programs (implemented by WHO)
- **Component 2. Improving Access to Water Supply and Sanitation (WSS) and Strengthening Local Systems:** 2.1: Restoring Access and Improving Quality to WSS Services in Selected Urban and Rural Areas (implemented by UNOPS); 2.2: Emergency Support for WASH Interventions in Response to COVID-19 Pandemic and Flash floods (implemented by UNOPS); 2.3: Enhanced Capacity Building of Water and Sanitation Institutions at the Local Level (implemented by UNOPS).
- **Component 3: Project Support, Management, Evaluation and Administration, (implemented by UNICEF, WHO, and UNOPS):** This component will support administration and monitoring and evaluation (M&E) activities to ensure smooth and satisfactory project implementation. The component will finance: (i) general management support for WHO, UNICEF and UNOPS; (ii) hiring of Third-Party Monitoring (TPM) agents,

with terms of reference satisfactory to the World Bank, that will complement the existing TPM arrangements for the implementing agencies; and (iii) technical assistance.

- **Component 4: Contingent Emergency Response Component (CERC). (Implemented by UNICEF, WHO, and UNOPS):** The zero-dollar CERC is in place to provide expedited response in case of emergency. There is a probability that an epidemic or outbreak of public health importance or other emergencies may occur during the life of the project, causing major adverse economic and/or social impacts. If this component is triggered, an Emergency Response Operational Manual will be prepared jointly and agreed upon with the World Bank to be used and the ESMF and RF will be updated to reflect the newly added activities.

The current sub-project falls under component 2 of the YEHCP which will be implemented by UNOPS. A brief description of component 2 is described below.

### **Component 2: Improving Access to Water Supply and Sanitation (WSS) and Strengthening Local Systems (implemented by UNOPS)**

This component aims to support the provision of WSS services for the population of Yemen through rehabilitation of medium to large WSS infrastructure, response to COVID-19 and flash floods and strengthening the capacity building of the local water and sanitation institutions at a decentralized level. The project will help preserve and strengthen the WSS system through supporting, inter alia, procurement and contract management, low carbon and climate resilient infrastructure, technical design, asset management, O&M of WSS facilities for medium to long term, information management, safeguard and leadership capacities of local water and sanitation institutions, etc.

#### **Sub-component 2.1: Restoring Access and Improving Quality to WSS Services in Selected Urban and Rural Areas (implemented by UNOPS)**

This sub-component aims to restore access and improve quality to WSS services at a decentralized level. It will be implemented by UNOPS in partnership with autonomous national and local water and sanitation institutions (e.g., Urban Water) – Project Management Unit (UWS-PMU), PWP, respective WSLCs in selected priority urban and peri-urban areas (that have WWTPs-Waste Water Treatment Plants) and local branches of the GARWSP –General Authority For Rural Water Supply Projects in selected rural areas based on clear and transparent selection criteria. Given the strong linkage between the level of water and sanitation services and environmental and health issues, this sub-component will focus on restoring access to improved water and sanitation services, with particular emphasis on priority sanitation needs, by investing in related urgent areas (i.e., rehabilitation and scaling up of medium to large scale facilities including rehabilitation of water and sanitation infrastructure, main water and sewerage pipelines and networks, water treatment plants, WWTPs, water wells, pumping and booster stations, related civil works of building and structures, etc.) to improve service provision. The sub-component will help monitor the quality of water and sanitation services through rehabilitation of public laboratories for water and wastewater quality testing and enhancing and strengthening the operational capacities of the WSLCs and their branches, AUs, branches of NWSA and GARWSP in the target areas in the delivery of safe water and sanitation services (e.g., installing small decentralized WWTPs on a pilot basis, purchase and use electrical generators; purchase, installation and storage of O&M materials such as; spare parts, measuring devices, manholes, sewage maintenance vehicles, machines, tools, laboratory equipment and consumable supplies. In addition, this sub-component will support the operation of main water and wastewater facilities by providing

electrical materials (e.g., submersible motor and control panel, transformers, etc.) and alternative sustainable energy solutions, in particular, solar panels to provide a clean, cost effective, and reliable energy source for disadvantaged areas.

### **Sub-component 2.2: Emergency Support for WASH Interventions in Response to COVID-19 Pandemic and Flash Floods (implemented by UNOPS)**

This sub-component aims to respond to COVID-19 Pandemic and the impact of flash floods at decentralized level and will be implemented by UNOPS in partnership with the autonomous national and local institutions (UWS-PMU, PWP), respective WSLCs and their branches to improve their readiness and capacities to respond to COVID-19's possible impact and other infectious diseases (e.g., cholera).

This sub-component will focus on selected priority urban, peri-urban, and rural areas at decentralized level including IDP camps, health centers, schools, and local markets, through addressing basic needs of:

- WASH requirements and supplies.
- Providing personal protective equipment (PPE) and WASH non-food items (NFIs) for water and sanitation staff.
- Water trucking to key health facilities.
- IDP camps, provide fuel to key WSLCs (if needed).
- Spare parts, equipment, and necessary supplies for the benefit of the priority areas for water and wastewater systems (where it is not included under sub-component 2.1).

It will also carry out wastewater evacuation through:

- Water sucking (evacuation) trucks.
- Building or repairing bathrooms in public areas to encourage appropriate hand washing and behavior changes on hygiene in close coordination with UNICEF.
- Constructing and operating of water distribution points and water tanks, water pumps to help the vulnerable communities better adapt to the climate change shocks and risk from natural disasters such as droughts (by increasing water availability) and floods (improved water pumping and wastewater treatment).

Rehabilitation of selected HFs and schools will be conducted based on clear and transparent criteria including access to a sustainable water source, community organization to take over and oversee the functionality once rehabilitation has been completed, ensuring integration of rehabilitation interventions including WASH, Health, etc., based on detailed need assessment, etc. WASH rehabilitation may include rehabilitation of water and sanitation systems within facilities' premises, connection of water and sanitation system of the facilities to the nearest public networks, cleaning of toilet tiles and walls, provision of water tank, water pipes/pumps/taps, hand washing basin, installation of solar system, etc. Water Trucking to Key HFs and Fuel supply to key WSLCs will be provided as transition emergency interventions and will be built on the results achieved from the exit strategies implemented under YEHCP toward having more sustainable interventions. Water quality will be addressed at water sources, distribution points, tanker trucks, and HH levels through testing water quality for public and private providers. The capacity of WSLCs will be strengthened through

rehabilitation of laboratories, provision of key equipment and enhancing the capacity of the local staff on water quality monitoring, analyzing, and reporting. As part of community participation, active Water User Associations (WUAs) and /or District Local Authorities (DLAs) especially those having women on the management committee will be involved in the identification of priorities, implementation of activities and O&M of projects whenever possible to ensure ownership of the rehabilitated system, and sustainability of service delivery and investments. Furthermore, this sub-component will consider a combination of sewerage network and non-network solutions whenever possible to ensure maximizing the impact and would, among others, adopt the prioritization tools developed under the Bank's City-Wide Inclusive Sanitation (CWIS).

### **Subcomponent 2.3: Enhanced Capacity Building of Water and Sanitation Institutions at the Local Level (implemented by UNOPS)**

This sub-component aims to strengthen the resiliency of key local WSS institutions at a decentralized level. Because the capacity building for the local institutions in urban areas will be covered under the second phase of the Yemen Integrated Urban Services Emergency Project (YIUSEP-II) implemented by UNOPS<sup>4</sup>, this sub-component will mainly target strengthening the capacity of local institutions in selected peri-urban, rural areas and WSLCs in urban areas and their branches in peri-urban areas that are not covered under YIUSEP-II. This includes training on technical and non-project-related aspects (including planning around when it is most convenient for women to join) to support the local institutions to assume their service delivery mandate more effectively beyond the boundaries of the project. The support may include provision of per diem to key staff if needed based on clear Terms of Reference (ToR) with associated deliverables and clear timelines. Support will build medium and long-term capacity at the local level and will cover topics including procurement and contract management, social and environmental standards, low carbon and climate resilient infrastructure, technical design, asset management, grievance redress and gender-sensitive citizen engagement, building WSLCs capacity on gender parity in recruitment, the advantages of gender diversity in the workplace, etc., and other critical needs which may be identified.

## **2. Sub-Projects/Component Description**

Due to the conflict in Yemen, which resulted in lack of power supply, it is difficult for the two facilities to secure diesel fuel and provide regular maintenance services for operating the diesel generators. Therefore, it is planned to provide PV Solar power for Sewer Pumping Station in Alteqaneyah/ Al Mansoorah Aden

The sub-projects will include Supply and Installation of Solar Systems for Sewer Pumping Station in Alteqaneyah/ Al Mansourah Aden

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<sup>4</sup> With the objective of complementarity and integration of WASH interventions and making best use of funds, the capacity building plan has been prepared under the new urban project (YIUSEP-II) based on detailed consultation with UNOPS and Local Partners. The plan includes cross-sectoral training for water, transport, energy sectors, etc. as well as specific training activities for local institutions of each sector at a decentralized level.

**Table # 1 PV solar System for the targeted facilities:**

#	Facility Name/Location	Type	Number of solar panels	Location (roof-top/ground)	PV Capacity
					KWp
1	Solar PV Energy for Sewer Pumping Station in Al-Teqaneyah/ Al Mansoorah Aden	Sewer Pumping Station	240	Ground	128KW

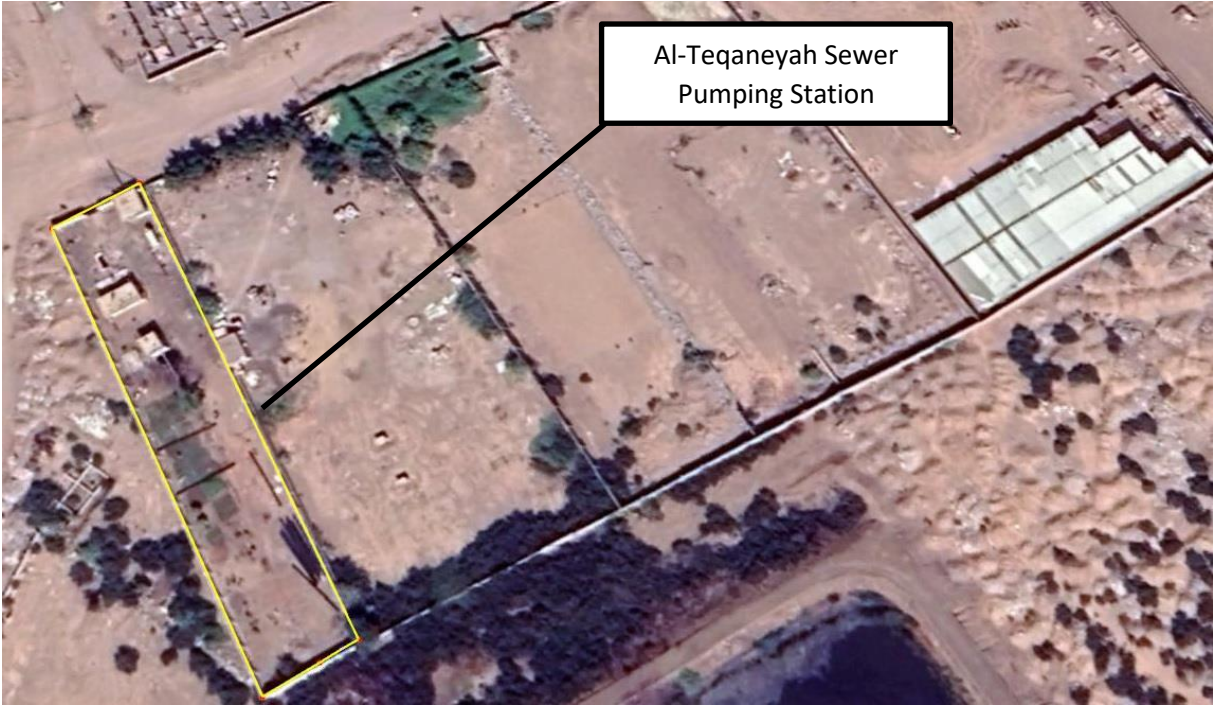
## Location

The targeted facilities are located in urban area in Aden City with the coordinates indicated in the following table # 2 and the two facilities location described in the two map below:

**TABLE # 2 : LOCATION OF THE TARGETED FACILITY**

#	Facility Name	Location Coordinates		City	District
		N	E		
1	Solar PV Energy for Sewer Pumping Station in Al-Teqaneyah/ Al Mansourah Aden.	12°51'08.0"	44°57'43.2"	Aden	Mansoorah

**FIGURE 2: MAP SHOWS LOCATION OF AL-TEQANEYAH SEWER PUMPING STATION- ADEN CITY, AL MANSOURA DISTRICT.**



## Planned activities

- The mounting structures and the PV Panels will be handled by using a HIAB,
- No welding will take place in the site as the mounting structures are in the form of pre-made parts for the two facilities.
- The mounting structure for the two (02) facilities will be fixed by using anchor bolts on concert base foundation.
- PV panels and the combiner box will be installed in the mounting structures for one facility and the other facility PV panel system will be installed in the ground

PV inverters with the control panels and monitoring equipment will be installed inside the control room located on the ground floor of the main building.

Installation of two fire extinguishers, as well as fire alarm detection system in the control room, in addition to installation of ventilation fans in room for air circulation.

The installed system is the hybrid PV-Diesel with fire alarm system that includes smoke and flame detectors and powder and CO2 fire-extinguishers

The installed system is PV solar system with fire alarm system that includes smoke and powder and CO2 fire-extinguishers. In addition to that, the facilities are equipped with their own fire safety system for other sections/buildings for Aden sewer pumping station.<sup>5</sup>

The nature and extent of life and fire safety measures required will consider the building type, occupancy, and exposures. Preventive or corrective measures might include:

- Fire Prevention
- Means of Egress
- Detection and Alarm Systems
- Emergency Response Plan
- Operation and Maintenance.

Installation of Inverters will be made, on the wall of the control room, and installation of inverters output circuit breakers in the control room. Upon completion of the installation of the main parts of the system and the completion of the installation of cables, the cables of the solar panels will be extended from the panels to the inverters and then to the output breakers.

Make small excavations around 50 cm depth for wiring earthling cable and connecting to earth busbar in control room.

There are several fire preventions measures during the design preparation, design review, technical specification preparation, work implementation and operation.

**Fire Prevention measures during design stage:**

- Selecting proper size of cabling compatible with international standards to avoid overloading/overheating of the cables.
- Include appropriate size of circuit breakers between the solar system components to prevent electrical surge.

**Fire Prevention measures of the solar system specifications:**

- Ensure high quality cables standard outdoor and indoor is applied.
- Ensure high quality circuit breakers is provided.

**Fire Prevention measures during implementation and operations stage:**

- Detection and fire alarm system
- CO2 fire-extinguishers
- Powder fire-extinguishers
- Emergency Response plan
- Safe and proper storage for the generator diesel according to the diesel MSDS
- Solar System Monitoring Unit to detect any problems and shut down the solar system and recording the system faults log.
- Provide Fire Safety training and drill for the facility operation staff and technicians prior to handing over. The contractor workers who will be installing the systems are already trained and qualified to install, test and operate the fire system.

**Work arrangements**

It was agreed with the facilities administrations that there will be two different and separate entrances for workers and hospital visitors and the working site will be isolated, fenced and only authorized persons can have access.

And It is agreed with the facility administrations that the contractor will provide the required training of the installed system operation and to provide the regular maintenance of the solar system during the warranty period.

UNOPS carried out an integrity test (Structural integrity assessment to determine how reliable an existing structure can carry current and future loads and fulfil the task for a given time period) for the building roof-top during selection of targeted facilities and the mounting structures is designed to tolerate wind load/speed up to 120 Km/hr.

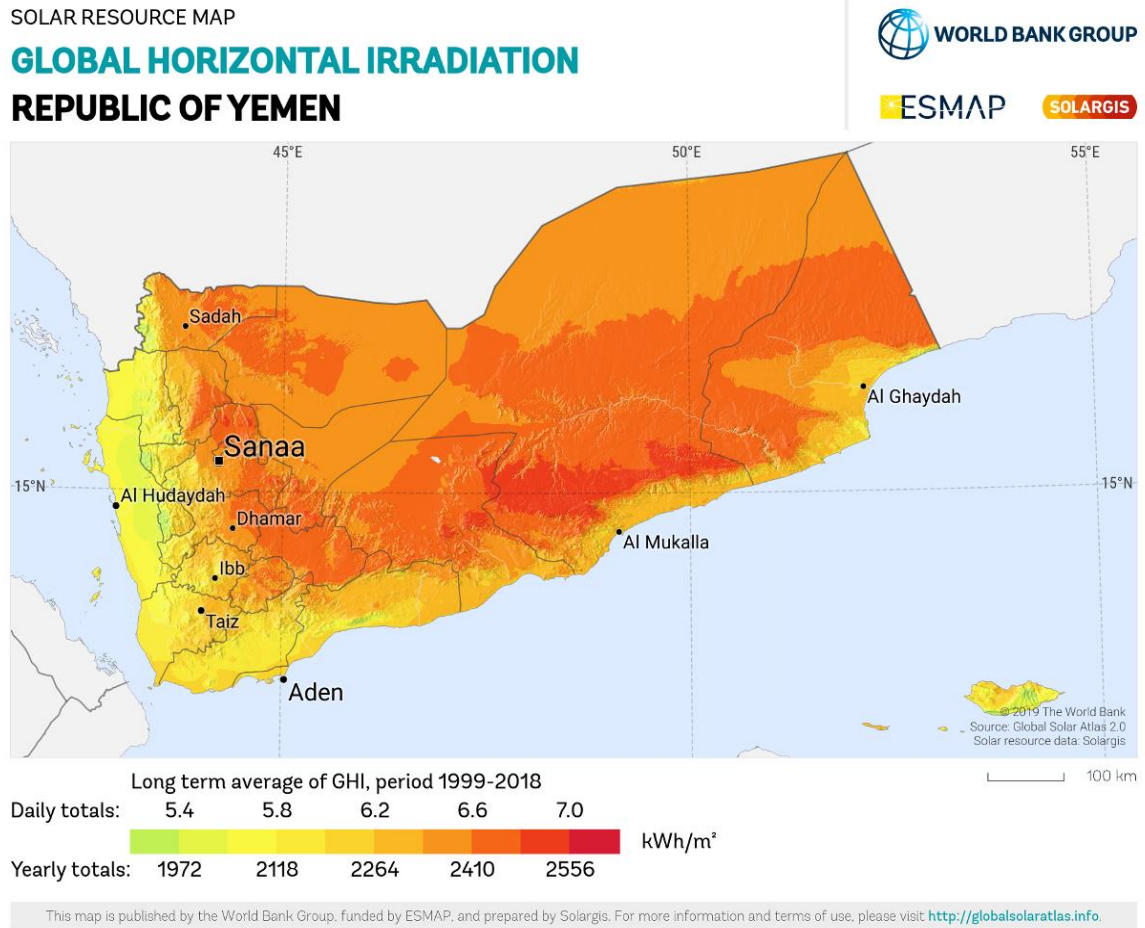


### 3. Environmental and Social Baseline

#### Yemen Solar Radiation

The figure below (figure 3) demonstrates the amount of solar radiation over Yemen. The figure was obtained from global solar atlas.

FIGURE 3 : SOLAR RESOURCE MAP



#### Yemen Solar Energy Irradiation

## Aden City

- **Temperature**

The hot season lasts for 4.0 months, from May 21 to September 22, with an average daily high temperature above 33 °C. The hottest month of the year in Aden is June, with an average high temperature of 35°C and low temperature of 30°C.

The cool season lasts for 3.8 months, from November 27 to March 19, with an average daily high temperature below 28 °C. The coldest month of the year in Aden is January, with an average low and high temperature of 24 °C and of 27 °C, respectively.

- **Precipitation**

Aden does not experience major seasonal variation in the frequency of wet days (i.e., those with greater than 0.04 inches of liquid or liquid-equivalent precipitation). The frequency ranges from 1 % to 10 %, with an average value of 5 %.

. The month with the most days of rain alone in Aden is August, with an average of 2.5 days. Based on this categorization, the most common form of precipitation throughout the year is rain alone, with a peak probability of 10 % on September 8.

- **Rainfall**

Aden experiences some seasonal variation in monthly rainfall.

The rainy period of the year lasts for 1.2 months, from August 10 to September 17, with a sliding 31-day rainfall of at least 13 mm. The month with the most rain in Aden is August, with an average rainfall of 13 mm.

The rainless period of the year lasts for 11 months, from September 17 to August 10. The month with the least rain in Aden is December, with an average rainfall of 3 mm.

- **Humidity ( Relative Humidity)**

Aden experiences significant seasonal variation in the perceived humidity.

The humid period of the year lasts for 10 months, from February 6 to December 21, during which time the comfort level is humid at least 76 % of the time. The month with the most humid days in Aden is May, with 30.8 days that are humid.

The month with the lowest humid days in Aden is January, with 22.0 days that are humid.

- **Wind**

The average hourly wind speed in Aden experiences significant seasonal variation over the course of the year.

The windier part of the year lasts for 6.5 months, from October 13 to April 28, with average wind speeds of more than 16.1 Km per hour. The windiest month of the year in Aden is January, with an average hourly wind speed of 21.1 Km per hour.

The calmer time of year lasts for 5.5 months, from April 28 to October 13. The calmest month of the year in Aden is September, with an average hourly wind speed of 12.1 Km per hour.

- **Solar Energy**

The average daily shortwave solar energy experiences some seasonal variation over the course of the year.

The brighter period of the year lasts for 2.1 months, from February 24 to April 27, with an average daily incident shortwave energy per square meter above 6.7 kWh. The brightest month of the year in Aden is March, with an average of 7.1 kWh.

The darker period of the year lasts for 3.8 months, from May 26 to September 19, with an average daily incident shortwave energy per square meter below 5.4 kWh. The darkest month of the year in Aden is July, with an average of 5.0 kWh.

- **Air Quality and Noise**

Air pollution in Yemen is caused by a variety of factors, including emissions from transportation vehicles, which is considered the main source of air pollution. Therefore, in cities such as Aden, the source of emission is recognized to be mainly from vehicles.

The pollutant concentrations are estimated to be several times higher than WHO set standards for air quality as well as the noise level.

## **Socio-economic**

- **Population**

Aden is the second most populous city of Yemen, with approximately 1.14 million residents of which 650 thousand are non-displaced, 290 thousand are returnees from displacement, 60 thousand are IDPs, and nearly 140 thousand are migrants and refugees. Those returnees and IDPs with family ties in Aden enjoy comparatively better opportunities for shelter and support. In addition, 140 thousand are refugees and African migrants, mainly Somalis. In contrast, they keep to themselves and generally do not often interact socially with the local population. Despite the worsening conditions in Aden, immigration from the Horn of Africa continues unabated, though many choose to return when faced with the reality of Yemen. Until recently, Aden was home to a significant population of North Yemeni descent. After March 2018, that population declined sharply. Of the more than 1 million Adenis, 790 thousand are considered as people in need (PiN) with 57 % in acute need and the remaining 43 % in moderate need. Despite being a major hub for coordination of humanitarian assistance, Aden is one of the most affected areas in terms of people in need (PiN) and has one of the highest non-resident IDP and returnee population in Yemen. The number of families that received Rapid Response Mechanism (RRM) assistance stood at 37,016. In addition, a severely damaged infrastructure, malnutrition, food insecurity, and disputes over land or property ownership and use are all contributing to complicated social dynamics. With 72 % younger than 34 years-old, Aden's population is young and restless.

The Rapid Response Mechanism (RRM) is designed to monitor humanitarian action, conduct multisector assessments (MSAs) of needs and to implement several types of emergency responses, including distributions of essential non-food items (NFIs) and high emergency biscuits (HEBs), emergency water, sanitation and hygiene (

## **Economy**

The Governorate of Aden is an important economic and commercial center of the Republic of Yemen. Since 2015, it has been the temporary capital of the internationally recognized government of Yemen.

It is located on the coast of the Gulf of Aden and consists of eight districts. It is home to Yemen’s main commercial port, Aden Port, and regional and international free economic zones.

The economic activities in the Governorate of Aden range from industry, fishing, and commerce to tourism and services. The port of Aden and the regional and international free economic zone located there make it an important economic center of Yemen. Industry in Aden consists of petrochemicals, notably the Aden refinery, as well as manufacturing plants. Aden has some minerals; most significantly scoria and perlite, volcanic glass, and clay minerals used in the manufacturing of building bricks. There are many and diverse tourism landmarks in Aden, including historic sites and attractive beaches

**Table 3: Targeted Facilities’ Beneficiaries**

#	Facility Name	Number of Beneficiaries
		Total
1	Al-Teqaneyah Sewer Pumping Station in Aden.	215,968

Layouts, drawings and photos from field visits for inspecting existing situation of the targeted facility:

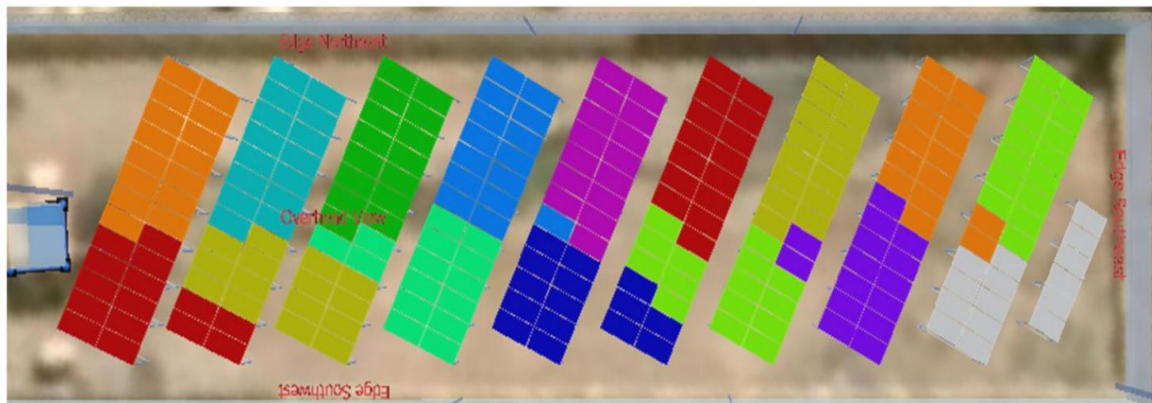
1- Al-Teqaneyah Sewer Pumping Station in Aden



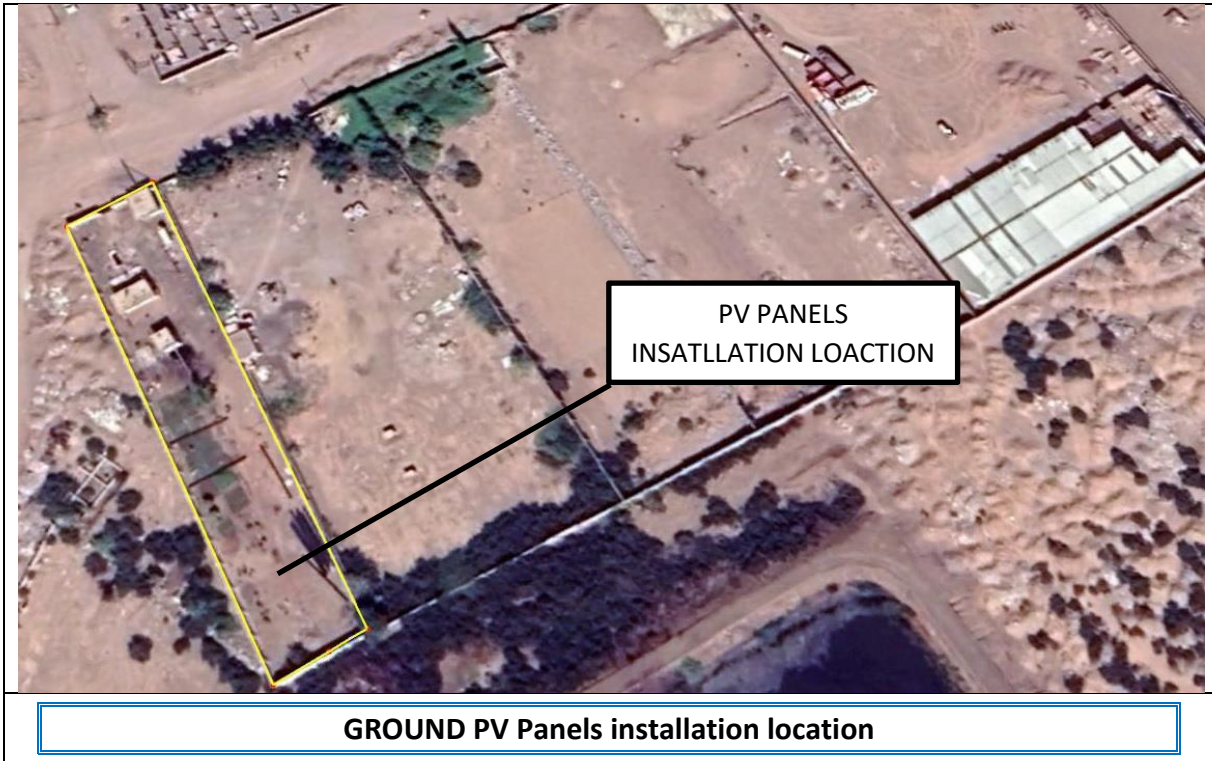
**Building from inside**



**PV INSTALLATION LOCATION**



**GROUND PV INSTALLATION DIAGRAM**



## 4. Consultation

Consultation was carried out during June 2022 for a total number of 23 persons (11 females and 12 males). The consulted persons were selected randomly from the beneficiaries of the services both males and females in different consultation sessions from within the residents in the neighbor areas.

### Topics of the consultations are to:

- Inform beneficiaries about the activities to be undertaken and the sub-projects timetable;
- Document and address local beneficiaries' concerns, expectations and feedback;
- Ensure participation of sub-project beneficiaries both females and males with awareness and give feedback on GM contacts, anonymous complaints and escalation of grievances if not satisfied with the resolution and action taken;
- Discuss the positive and negative impacts that the sub-projects will have and proposed mitigation measures to avoid possible negative impacts.
- Raise awareness on the protective measures from Covid-19 Pandemic.
- Provide awareness to the consulted persons both males and females on their rights to participate in all sub-project implementation phases, and to give their feedback and raise their concerns.

### Consultation Findings and Feedback

Interviews were conducted by the Female Social Facilitators. The consultation process took the form of semi-structured discussions and interviews with the beneficiaries both males and females, and feedback was collected by questionnaires. The interview started with a brief explanation of the nature and objective of the sub-projects and potential impacts with proposed mitigation measures.

The interviewed persons both males and females have appreciated the support of supplying and installing solar systems in the facilities to ensure sustainable and clean source of energy. All mitigation measures were discussed in detail with the consulted persons.

The main issue addressed by the consulted persons of the facilities staff were the importance of adding power source to support continuation of services and reduction of operation cost.

## 5. Environmental and Social Impact Assessment

### Applicability:

YEHCP ESMF applies because this sub-project may trigger some HSSE impacts such as Occupational Health and Safety (OHS) impact and environmental or social impacts.

### Eligibility:

These sub-projects are eligible for support because they do not have any of the attributes in the following exclusion list:

### Exclusion List

#	Question	Answer	
		Yes	No
1	Production or activities involving harmful or exploitative forms of forced labor/harmful child labor; For direct and contracted workers		X
2	Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements;		X
3	Production or trade in weapons and munitions;		X
4	Gambling, casinos and equivalent enterprises;		X
5	Trade in wildlife or wildlife products regulated under CITES;		X
6	Production or trade in radioactive materials;		X
7	Production or trade in or use of un-bonded asbestos fibers;		X
8	Production or trade in wood or other forestry products from unmanaged forests;		X
9	Production or trade in products containing PCBs;		X
10	Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals;		X
11	Production or trade in pharmaceuticals subject to international phase outs or bans;		X
12	Production or trade in pesticides / herbicides subject to international phase outs or bans		X
13	Production or trade in ozone depleting substances subject to international phase out;		X
14	Production or activities that impinge on the lands owned, or claimed under adjudication, by indigenous peoples, without full documented consent of such people.		X
15	Landfills and waste transfer stations,		X



<b>16</b>	Power plants,		X
<b>17</b>	Large-scale transport infrastructure such as highways, expressways, urban metro-systems, railways, and ports,		X
<b>18</b>	Investments in extractive industries; commercial logging,		X
<b>19</b>	Dams, or projects involving allocation or conveyance of water, including inter-basin water transfers or activities resulting in significant changes to water quality or availability,		X
<b>20</b>	Activities that would convert natural habitats or significantly alter potentially important biodiversity and/or cultural resource areas,		X
<b>21</b>	Activities that would require the relocation of residential households and/or significant involuntary land acquisition,		X
<b>22</b>	Activities in disputed areas.		X

## 6. Environmental and Social Screening

Environmental and social screening was conducted using the YEHCP ESMF screening form, the solar system is environmental-friendly, who's PV Panels and equipment will be installed within the same facility ( Aden) and do not cause disturbance to the community, and the environmental and social impacts will be mostly positive.

Due to the nature and scope of the PV solar activities, the expected air pollution and noise level are low.

Question	Answer		ESS relevance	Due diligence/ Actions
	Yes	No		
Does the sub-project involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructure?	X		ESS1	ESMP, SEP
Does the sub-project involve land acquisition and/or restrictions on land use?		X		SEP
Is the sub-project associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant?	X		ESS3	ESMP, SEP
Does the sub-project use additional technically feasible water conservation measures?	X		ESS1, ESS3	ESMP
Does the sub-project consider additional strategies to adopt measures that avoid or minimize negative effects of emissions?	X			
Does the sub-project have an adequate system in place (capacity, processes and management) to address waste?	X			
Does the sub-project involve the recruitment of workers including direct, contracted, primary supply, and/or community workers? <sup>6</sup>	X		ESS2	LMP, SEP
Does the sub-project have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?	X		ESS2, ESS4	LMP

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<sup>6</sup> The sub-project is inside the city where the workers are from the same places and they will leave to their homes after the working hours finished.

Does the sub-project have a GM in place, to which all workers have access, designed to respond quickly and effectively?	X		ESS10, ESS2	SEP, LMP
Does the sub-project involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?		X	ESS 4	SMP
Does the sub-project establish and implement appropriate quality management systems to anticipate and minimize risks and impacts that services may have on community health and safety.	X			ESMP, SEP
Does the sub-project apply the concept of universal access where technically and financially feasible?	X		ESS4	
Is the sub-project located within or in the vicinity of any ecologically sensitive areas?		X		ESMP, SEP
Is the sub-project located within or in the vicinity of any known cultural heritage sites?		X		ESMP, SEP
Does the project area present potential Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) or Sexual Harassment (SH) risk?	X		ESS1/ESS4	ESMP, SEP/GBV Action Plan

## 7. Risk Level and Mitigation Instruments

The sub-projects assigned E&S risk is moderate, because the sub-projects' interventions are small to medium scale, and do not involve activities that have a high potential environmental and social and OHS impacts, and the solar systems are environmentally friendly ( Aden Sub-project)) will be especially manufactured to meet Tire 4 final emission standards and the emission from generator will be monitored regularly during warranty period and after that. . Actions are required to minimize risk to OHS of workers, inadequate site management. Therefore, UNOPS will include environmental and social requirements for contractors including all OHS requirements, as well as Health and Safety prevention measures from COVID-19 in the contracts and tender documents.

The Environmental and Social Management Framework (ESMF) to this project (YEHCP) was prepared by UNOPS to meet the requirements of the World Bank's Environmental and Social Framework (ESF) including the WBG Environmental Health and Safety guidelines, as well as national environmental laws and regulations.

### **Environmental Risk and Impacts:**

- Solid waste produced by work accumulated and pollutes the environment including E-waste.
- Air pollution (i.e., dust from operating vehicles, exaction and emissions from equipment/transportation trucks)
- Soil and ground water contamination from fuel leaks
- Environmental pressures on workers (heat strokes, dust storms)
- GHG emissions from vehicles and machines.

### **Social Risk and Impacts:**

- Lack of worker's awareness and knowledge on social safeguard issues on gender, SEA and GBV.
- Child Labor
- Low aesthetic value
- Access of public into working site. Impacts:
- Public Exposure to high-risk activities (Lifting and Excavation,)

### **OHS Risk and Impacts:**

- Working at Height Impacts:
- Occupational fatalities and major injuries caused by falling from heights
- Lifting Operations Impacts:
- Failure of lifting equipment;
- Falling loads; and

- Workers being crushed by a moving Load or lifting equipment which all might result in fatalities or injuries.
- Air pollution due to emissions from equipment/transportation trucks and the diesel generator that might result in:
  - Mortality caused by cardiovascular and respiratory disease
  - Chronic incidence caused by respiratory or cardiovascular disease
  - Decline in physiologic functions Intrauterine growth restriction
- Electricity Shock Impacts:
  - Thermal burns
  - Muscle, nerve and tissues damage due to electrical shock
  - Fall from height due to sudden electric shock
  - Fatalities or injuries
- Manual Handling Impacts:  
Manual Handling Injuries that includes
  - Fractures
  - Damage to muscles, ligaments and tendons
  - Spinal disc injuries
  - Trapped nerves
  - Abrasions and cuts
  - Burns
  - Hernias
- Excavation Impacts:
  - Dust generated by excavation activities causing breathing difficulty
- Hazardous Substances and Wastes Impacts:
  - Injuries or fatalities that result from:
  - Electric shock
  - Fire
  - Flash burns
- Infection by Covid-19 Impacts:
  - Transmission of corona virus between site workers
  - Site workers' lives could be at risk.

### **Operation and maintenance**

- Operation and Maintenance (Staff Health and Safety) i.e., for risk of potential electric shock to the maintenance staff and working at height risks that may be caused during cleaning/ inspection or general maintenance of the solar panels systems.
- Operation and Maintenance (cleaning using water).
- Proper management of wastes (e.g., PV panels) and encourage recycling where appropriate after lifespan elapsed (25 years) in appropriate arrangements with the facilities administrations.

UNOPS will ensure that:

- The generic environmental and social requirements for contractors including all OHS requirements that are relevant to the project activities will be applied. This will include site specific OHS requirements as indicated in this ESMP and included in the tender documents and contract to fully avoid or mitigate environmental, social, occupational health and safety impacts that might arise from this activity.
- The supply and installation of PV solar system equipment will be compliant to environmental, health and safety standards and specifications including electricity safety, weather resistance, and UL standards.
- Safe installation of solar system and solid fixation of PV mounting structures in safe place on the roof-top of the facility.
- The facility administration, guard and/or technician will receive proper training on the safe operation and maintenance of the solar PV system.
- The operation and maintenance training will be conducted by the contractors to the facility administration staff and training will be conducted by UNOPS for both contractors' workers before installation and the facility administration staff after installation.

UNOPS will also require that the contractor:

- Inspect existing facility and apply all safety measures to reduce the risk of any injury to the workers during installation or the users during operation, subject to written approval by the UNOPS engineer provided before implementation of work.
- Conduct risk assessment for solar system installation, evaluate the risk, and put the appropriate safety measures in place and submit it for review and approval.
- Fully implement permit to work system, <sup>7</sup> method of statement and job safety analysis to ensure all tasks are well prepared and follow all necessary safety mitigation and prevention measures.
- Provide safety training to all workers including working at height, lifting operations, electrical safety and permit to work before commencing any work
- Provide the required safety and health PPE and hygienic materials to workers to protect workers and ensure their safety and prevent them from Covid-19 infection.
- Provide fully insulated PPE, isolated installation tools, instruments and equipment.
- Provide appropriate training on the use, serviceability and integrity of the necessary PPE.
- Ensure proper use of ladders and scaffolds by trained employees, apply regular inspection and testing, use of fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or self-retracting inertial fall arrest devices attached to fixed anchor point or horizontal lifelines.
- Prepare emergency response plan including contact numbers, evacuation plan and provide necessary first aid equipment in site and transportation and contracted with the nearest hospital in case of any emergency.
- Health and safety training should be provided to workers to avoid electrocutions and potential electrical hazards and wearing proper PPEs.
- The contractors must also comply with the project LMP, including the establishment and maintenance of a grievance mechanism GM for workers.

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<sup>7</sup> Work permit will be issued prior any activity to ensure that all required control measures are taken to prevent/ mitigate all the H&S and E& S impacts.

- Follow the fall prevention and protection measures by:
  - Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area.
  - Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall and a fall protection plan should be in place which includes the following aspects:
    - Training and use of temporary fall prevention devices, such as rails or other barriers able to support a weight of 200 pounds, when working at heights equal or greater than two meters or at any height if the risk includes falling through an opening in a work surface.
    - Training and use of personal fall arrest systems, such as full body harnesses and energy absorbing lanyards able to support 5000 pounds.
  
- Follow the slip prevention measures in the same elevation by:
  - Use of slip resistant footwear and locating electrical cords, cables and ropes in common areas and marked corridors to prevent risk of slips and fall associated with uncontrolled use of electrical cords and cables on the ground.
  - Use of control zones and safety monitoring systems to warn workers of their proximity to fall hazard zones, as well as securing, marking, and labeling covers for openings in floors, roofs, or walking surfaces.

UNOPS has already taken the following steps in GBV/SEA/SH:

- In the stakeholder consultation meetings UNOPS has presented the project GBV SEA/SH action plan and during the meetings we focused on female’s participants and ensure to explain about the GM mechanism and highlighted how it is transparent, secure and confidential to use any of the GM access point
- UNOPS has developed visibility materials to promote awareness for SEA/SH in local language (Arabic) the materials and messages used adapted to be suitable for Yemen context and sensitivity of the subject.
- GM focal point received specialized training about SEA/SH cases and the way to deal with it using Victim centered approach
- UNOPS developed SOP and protocol for GM in how to deal with SEA/SH cases.
- UNOPS has conducted refresh sessions for Project Personnel in GBV/SEA/SH and trained retainer’s sites engineers as well
- UNOPS has prepared risk assessment tools for GBV and will require contractors to fill in a checklist on GBV/SEA/SH and to prepare code of conduct for their workers/staff.
- As part of YEHCP GBV SEA/SH action plan UNOPS will roll out SEA/SH prevention and response plans for contractors , where the contractors need to prepare the action plan part of the tender documents , UNOPS is supporting to enhance the contractors capacity in this area considering the fact that they have almost zero or limited knowledge and capacity on GBV. UNOPS developed contractors action plan template covering priority areas and UNOPS has conducted induction sessions for contractors about GBV requirements and presented to how to prepare

site-specific GBV SEA/SH prevention and response plans (GBV Action Plans) using the developed template. Additional in-depth training sessions will follow and will continue during project life span

Developed GVB action plan template for contractor Link:

[https://drive.google.com/drive/folders/1ZRtjW6yldQmVZPKgGY3UC\\_aQ3S9xvwQN?usp=sharing](https://drive.google.com/drive/folders/1ZRtjW6yldQmVZPKgGY3UC_aQ3S9xvwQN?usp=sharing)

- UNOPS will train contractors' SEA/SH focal points
- UNOPS will require contractors to employ at least 5% female staff to encourage gender mainstreaming.

### **Labor Management Procedures:**

The estimated/planned number of labors for solar installation is 12 skilled and 6 unskilled workers in each facility which the contractor is responsible for.

Child Labor and Forced Labor:

- Ensure all workers are 18 Years old or older, and no child, forced, involuntary or unpaid labor will be used in any work. UNOPS will ban all forms of forced labor under the project as it has been stated in the LMP and ESMF.
- A labor log will be maintained and all workers will be registered, and the workers' ages will be controlled through their national IDs or passports.
- UNOPS will include specific language in the bidding documents so as to alert the industry to the issue of forced labor and require that bids are accompanied by declarations from suppliers. These documents will include required procurement documents that solar panels/components for the "core functions of a project" as defined in the World Bank's Environmental and Social Framework): (i) applicable provisions in the invitation for bids, instructions to bidders and qualification requirements; (ii) a Forced Labor Performance Declaration; (iii) a Forced Labor Declaration; and (iv) a strengthened contract clause on Forced Labor.
- All procurements that apply the declaration will be subject to Bank prior review and Bank no objection. The new requirements apply to both international and national competitive procurement and any direct selection/direct contracting within the scope of application. The requirements apply to new procurement advertised or direct contracting awarded on or after January 1, 2022.
- The contractor shall protect the workers from any risk that may be encountered during the implementation including exposure to the corona virus (COVID-19).
- The contractor shall maintain occupational health and safety system in the site to protect workers from hazards and risks and provide adequate health and safety training, required PPE, first aid box, and toilets and potable drinking water.
- UNOPS will ensure in the tender documents that contractors must provide valid insurance policy covering worker's insurance during sub-project implementation and maintenance period.

### **Community Health and Safety**

1. Exposure to COVID, risk during installation of the panels.
2. Carrying the PV panels within these public buildings and the hazard that the educational communities will be exposed to.



3. Access of public into working site.
4. Security risks.

These impacts on the community health and safety can be mitigated through:

1. Working hours will be scheduled when the educational facilities are closed
2. Install barriers, danger warning signs and restriction signs to only authorized persons and signs showing the potential danger to the public. And establish barriers around the working site roof-top, equipment area and excavation area.
3. There will be no access to the site except for authorized personnel.

## 7.1 Grievance Mechanism (GM)

In accordance to the requirements of the ESS10 and based on the existing SEP prepared for the parent project, UNOPS has established Grievance Mechanism (GM) with the following contact channels: UNOPS/Sana'a –Toll Free Number 8000190 -Tel: 01 504914/915 - SMS: 739888388 Email: GRM.yemen@unops.org for Yemen Emergency Human Capital Project (YEHCP) with a new Toll Free Phone Number 8000190 to enable beneficiaries to communicate their concerns regarding the project activities. More specifically, the GM details the procedures that communities and individuals, who believe they are adversely affected by the project or a specific sub-project, can use to submit their complaints, as well as the procedures used by UNOPS and its local partners to systematically register, track, investigate and promptly resolve complaints. This is separate from the GM that is established by the contractor for the workers to meet the requirements of the ESS2 as they are spelled out in and LMP prepared for the project.

Accordingly, hard copies of the translated forms of GM (which is attached in Annex 2) was provided to the interviewed people and they have been informed about the GM contact information that will be also posted at the sub-project site signboard to ensure any grievance can be addressed in an amicable manner. Resolving complaints at community level is always encouraged to address the problem that a person may have during implementation and/or operational phase.

Anonymous complaints can be provided for both staff and local community and GM can be used as a channel for any kind of complaints including GBV/SH

Bank procedures require that Grievance Mechanisms (GMs) be established and operational prior to commencement of the sub-projects, and that they continue to operate for one year following completion of the works. This GRM should take into account the availability of judicial recourse as well as traditional and community dispute resolution mechanisms.

UNOPS has established Grievance Mechanism (GM) for Yemen Emergency Human Capital Project (YEHCP) to enable beneficiaries to communicate their concerns regarding the project activities. More specifically, the GM details the procedures that communities and individuals, who believe they are adversely affected by the project or a specific sub-project, can use to submit their complaints, as well as the procedures used by UNOPS and UWS-PMU/Aden Region to systematically register, track, investigate and promptly resolve complaints.

Accordingly, hard copies of the translated application of the GM (attached in Annex 2) were

provided to interview people and they have been informed that the GM contact information will be posted at the sub-project site to ensure any grievance can be addressed in an amicable manner. During monitoring, UWS-PMU/Aden Region will conduct inspections for complaints. Resolving complaints at community level is always encouraged to address the problem that a person may have during implementation and/or operation phase.

UWS-PMU/Aden Region maintains records for grievances and complaints including minutes of discussions, recommendations and resolutions made.

### **Registering Complaints**

UWS-PMU/Aden Region has developed GM system for YEHCP along with UNOPS GRM. It is to improve access to GM, this is to provide multiple access points to the GRM for beneficiaries to voice their concerns. These access points will be advertised at sub-project level and put on the sign boards on each sub-project site, and include GM contact information including hotline, landline, mobile SMS, email, and website:

### **UNOPS GRM**

Address: Haddah Street, former European Union Office Building, Sana'a Tel: Landline +967 1 504914 and +967 1 504915, Toll Free 8000190

Focal Point: Marwa Obaid

SMS and WhatsApp: +967 739888388

Email [grm-yemen@unops.org](mailto:grm-yemen@unops.org) Website: [www.unops.org](http://www.unops.org)

The GRM contact information will be posted in Arabic and be communicated through multiple channels to ensure all groups can easily access contact information and relevant mechanisms to provide feedback.

Grievances can be brought up by affected people including workers in case of: (i) non-fulfillment of contracts or agreements; (ii) disputes related to destruction of assets or livelihoods; (iii) disturbances caused by rehabilitation activities; (iv) concerns around safety and protection related to project's activities.

Anonymous complaints will be admissible to their attention verbally or in writing by sub-projects affected communities or individuals and will relay these concerns in writing to UNOPS on a next day basis. UNOPS will determine if these concerns rise to the level of a complaint.

UNOPS will register the complaint in a dedicated log by gender, age, and location, and include a copy of the complaint and supporting documents. A draft template for registering grievances is annexed.

UNOPS will record and document complaints received in the sub-project file and the sub-project progress reports, including the number and type of complaints and the results of their resolution.

### **Tracking, Investigating and Resolving Complaints**

The GRM log maintained by UNOPS will track the date the complaint was received, date responded to, the type of response, and if the complaint was resolved to the satisfaction of the plaintiff.

The Environmental and Social Officer (ESSO) will coordinate with local partners, local field staff and local government officials to ensure prompt follow up action in response to each complaint. More specifically, the GM focal point will forename complaints:

Inform the plaintiff if the complaint is accepted or rejected within 3 days from receiving the complaint; any technical input from project engineers; if necessary, the response will require input from project engineers.

If the complaint is accepted, send the plaintiff an officially stamped review card indicating:

- plaintiff name or legal representative
- plaintiff address
- complaint title
- review date
- list of annexes submitted with the complaint

Work with engineers, local partners, and contractors to resolve the complaint within 28 days of its submission.

#### **Grievance Categories**

The grievance could be among but not limited to the following categories:

- Access to project benefits (e.g., no or insufficient jobs created for local communities);
- Non-equal distribution of project services among target beneficiaries;
- Disputes (e.g., matters raised by/related to beneficiaries).
- Disturbance (e.g., noise, traffic road access and public safety, etc.).
- GBV/SEA/SH grievance.
- Internal grievance (worker' s grievance).

#### **Steps to handle GRM**

- Publicizing: stakeholder' s consultation, printed materials;
- Receiving and registering complaints: staff at local and central level who will be responsible for receiving, registering and tracking complaints;
- Acknowledging: The GM staff (team) acknowledges receipt of the complaint within 2-3 working days. Inform the complainant on the eligibility of his/her complaint;
- Anonymous complaints: To be studied as well;
- Reviewing and investigating, collect, review and analyze related documents;
- Conducting interviews of the involved persons, officers and staff;
- Analyzing the related national legislations & regulations, World Bank Policies & Guidelines and UNOPS standards;
- Summarizing the facts and findings;
- Developing resolution options: based on the collected evidence, the GRM staff (team) will draw conclusions, make recommendations for solutions, and present it to the

complainant;

- If the solution is not accepted, complaint will be presented to the Program Manager as a second level to appeal who can make the resolution and/or can delegate an arbitration team to investigate on the complaint and propose recommendations for resolution;
- Implementing resolution: If the solution is accepted, then it will be implemented;
- Monitoring and closing: the complaint should be monitored for a reasonable period of time to make sure that the complainant does not express additional concerns, and then the complaint could be closed.

## Grievance Mechanism for Workers

The Contractor shall put in place a Grievance Mechanism for workers and the workers of its sub-contractors that is proportionate to its workforce. The GM shall be distinct from the Project level Grievance Mechanism for affected individuals and communities, and shall adhere to the following principles:

- *Provision of information.* All workers should be informed about the grievance mechanism at the time they are hired, and details about how it operates should be readily available, for example, included in worker documentation or on notice boards.
- *Transparency of the process.* Workers must know to whom they can turn to in the event of a grievance and the support and sources of advice that are available to them. All line and senior managers must be familiar with their organization's grievance procedure.
- *Keeping it up to date.* The process should be regularly reviewed and kept up to date, for example, by referencing any new statutory guidelines, changes in contracts or representation.
- *Confidentiality.* The process should ensure that a complaint is dealt with confidentially. While procedures may specify that complaints should first be made to the workers' line manager, there should also be the option of raising a grievance first with an alternative manager, for example, a human resource (personnel) manager.
- *Non-retribution.* Procedures should guarantee that any worker raising a complaint will not be subject to any reprisal.
- *Reasonable timescales.* Procedures should allow for time to investigate grievances fully but should aim for swift resolutions. The longer a grievance is allowed to continue, the harder it can be for both sides to get back to normal afterwards. Time limits should be set for each stage of the process, for example, a maximum time between a grievance being raised and the setting up of a meeting to investigate it.
- *Right to appeal.* A worker should have the right to appeal to the World Bank or national courts if he or she is not happy with the initial finding.
- *Right to be accompanied.* In any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or union representative.
- *Keeping records.* Written records should be kept at all stages. The initial complaint should be in writing, if possible, along with the response, notes of any meetings and the findings and the reasons for the findings. Any records on SEA shall be registered separately and under the strictest confidentiality.
- *Relationship with collective agreements.* Grievance procedures should be consistent with any collective agreements.

- *Relationship with regulation.* Grievance processes should be compliant with the national employment code.
- *Reporting of grievance resolution*

### **Gender – based Violence (GBV)/Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH):**

The contractor and workers should sign the Code of Conduct and ensure workers respect and adhere to the Code of Conduct (CoC) to respect the local community cultures, and adhere to the social safeguard issues on Gender, SEA/SH and GBV. Raise awareness on GM system and how it can be used to report any GBV cases.

Training of workers: UNOPS and Contactor should provide the workers with required training and daily toolbox talk in the OHS, GBV, SEA and GRM.

Contactor should provide the work site with GM system for all workers including providing complaints box and complaint means.

### **Information Dissemination and Disclosure**

The World Bank will disclose documentation relating to the environmental and social risks and impacts of YEHCP prior to project appraisal. This documentation will reflect the environmental and social assessment of the project and be provided in draft or final form (if available). The documentation will address, in an adequate manner, the key risks and impacts of the project, and will provide sufficient detail to inform stakeholder engagement and World Bank decision making. Final or updated documentation will be disclosed when available. UNOPS also disclose ESF documents of the project in UNOPS website as well in both languages( Arabic & English) in the world bank web site and the UNOPS web site.

### **COVID 19**

UNOPS will require contractor to implement extra measures during COVID 19 Pandemic, including the following prevention measures to protect workers and will depend on emphasizing basic infection prevention measures and all contractors/suppliers should implement good hygiene and infection control practices, including but not limited to:

- Promote frequent and thorough hand washing, including by providing workers, customers, and worksite visitors with a place to wash their hands. If soap and running water are not immediately available, provide alcohol-based hand rubs containing value of alcohol recommended by WHO.
- Encourage workers to stay home if they are sick.
- Encourage respiratory etiquette, including covering coughs and sneezes.
- Provide customers and the public with tissues and trash receptacles.
- Employers should explore whether they can establish policies and practices, such as flexible worksites (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), to increase the physical distance among employees and between employees and others if state and local health authorities recommend the use of social distancing strategies.
- Discourage workers from using other workers' phones, desks, offices, or other work tools and equipment, when possible.

- Maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. When choosing cleaning chemicals, employers should follow the manufacturer's instructions for use of all cleaning and disinfection products (e.g., concentration, application method and contact time, PPE).
- Workers should wear masks, gloves and goggles at all time in the worksite.

## **HSSE Impacts Analysis Plan and Mitigation Measures**

### **Responsibilities:**

#### **The UNOPS ESSO (Environment and Social Safeguards Officer) will:**

- Determine the environmental and social issues that might be triggered by the subproject.
- Identify the relevant Environmental and Social Standards (ESS).
- Determine the appropriate Environmental and Social risk rating for the subproject.
- Specify the type of environmental and social assessment required, including specific instruments/plans.
- Conducting the Environmental and social impact screening for the sub-project.
- Prepare and/or update health, safety, social and environmental management plans, review them on a regular basis and always keep them up to date.
- Advise and instruct project staff, contractors, consultants and other stakeholders on various safety, health, social and environmental matters related to project implementation.
- Support the Project Manager in raising awareness on health and safety issues among project staff, consultants, contractors and other stakeholders and within UNOPS.
- Conduct risk assessment and enforce preventative measures on HSSE.
- Initiate, organize and conduct HSSE training for UNOPS project team, contractors, consultants and other stakeholders.
- Inspect work sites and the work of personnel on a regular basis to identify issues of non-conformity and enforce necessary actions where unsafe acts or processes that seem dangerous or unhealthy are detected.
- Oversee installations, maintenance and disposal of substances, plants and equipment etc. to ensure they are done in conformity with applicable laws and industry best practice.
- Record and investigate incidents (including near misses) to determine the cause and to propose improvements to processes in the future.
- Prepare reports on incidents (including near misses) and compile statistical information to present to upper management on HSSE matters.
- Ensure a safe workplace environment is maintained at all times without risk to health and safety of everyone including workers, UNOPS staff, other stakeholders and the general public.
- Ensure that all Health & Safety policies, procedures, rules and regulations are adhered to and are regularly reviewed, updated and communicated.
- Ensure the contractor meets its statutory obligations in all areas pertaining to health, safety and welfare at work, including statutory training and reporting.
- Ensure that safety inspections, risk assessments, working procedures are managed, and contractors and employees are aware of their responsibilities in relation to health and safety issues.
- Co-ordinate the development of HSSE policies, systems, procedures and guidelines.
- Ensure full and accurate health and safety training records are documented.
- Establish a full program of documented HSSE inspections, audits and checks.
- Establish and conduct a structured program of health & safety training (including a well-developed induction program) for project staff, contractors, consultants and other stakeholders.

- Establish an HSSE Committee, manage and devise the agenda for, chair and formulate & distribute minutes for the Health & Safety Committee meetings.
- Keep up to date with all aspects of relevant health, safety & welfare at work legislation and communicate relevant changes to the stakeholders.
- Provide regular reports to the Project Manager on relevant health and safety activities.
- Participate in regular site meetings to report on relevant health & safety matters and to provide necessary advice.
- Any other tasks assigned by the Project Manager.

### **HSSE Officer:**

- Conduct Site HSE induction for contractor HSE officer, UNOPS engineers and all people involved in the project
- Conduct training and awareness on procedures
- Facilitate risk assessments for routine/non-routine tasks
- Contribute to the preparation of method statements
- Facilitate incident investigation and reporting
- Plan and execute emergency drills and disseminate lessons learned
- Conduct inspections on Site using a format that is acceptable to the UNOPS
- Ensure that all deviations found during inspections and corrective and preventative actions from incidents shall be documented and rectified on or before the due date set
- Verify the adequacy and safety of all work proposed, tools and equipment
- Comply with audit procedures and relevant legislation
- Organize and conduct periodic health and safety campaigns and HS champions recognition events
- Arrange regular HS meetings

### **Gender Focal Point:**

#### **Technical support**

- Be a source of knowledge and information; be a resource on questions related to gender mainstreaming, in particular, how GM can be strengthened in project
- Development, design and implementation.
- Review project proposals and assist project developers in using tools such as gender analysis, gender marker, gender action plans and gender mainstreaming checklists for UNOPS project proposals.
- Provide advice on addressing gender related issues in project management at design, monitoring and implementation stage.
- Develop a Gender Action Plan for and consistently monitor implementation by relevant personnel or teams.
- Identify opportunities for collaboration with other UN entities or regional networks/platforms to work on GM issues.
- Provide inputs to UNOPS-wide reporting on gender mainstreaming.

#### **Capacity development**



- Assess the capacity of all involved personnel, and identify the needs of colleagues for training in gender mainstreaming.
- Support the coordination and facilitation of gender mainstreaming training activities.

### **Knowledge management**

- Communicate key information, knowledge documents, tools including promotion of relevant training opportunities.
- Actively participate in the UNOPS global Gender Focal Point discussions and network.
- Document and disseminate best practices and lessons learned on gender mainstreaming,
- Participate in country level UN Gender Theme Group or other appropriate networks.

### **The UNOPS Project Team**

- UNOPS will mitigate the ESHS risks associated with contractors and their activities, by including in the contracts the ESHS requirements for contractors
- UNOPS will ensure that the Environmental and Social Requirements for Contractors will be applied by contractors, to fully avoid or mitigate environmental or social impacts that might arise from their activities.
- UNOPS will conduct regular visits by their HSE team to monitor implementation of safeguards.
- UNOPS will monitor the contractors' technical work by conducting regular monitoring visits to the sites

### **The contractor**

- The contractors are responsible for fulfilling the Environmental and Social safeguards as listed in the BOQs and the environmental and social requirements for contractors and all OHS requirements.
- The contractor will be responsible for:
  - Providing a competent safety officer for each site.
  - Providing Occupational Health and Safety training to all employees/workers involved.
  - Applying safety permit to work, Job Safety Analysis, Method of Statement and Risk Assessment for all working activities at site to ensure full implementation of ESMP and OHS requirements.
  - Providing adequate safety training for all workers.
  - Provide well-maintained checked equipment and licensed operators.
  - Avoiding indirect impact on existing old buildings such as affecting masonry through vibration.
  - UNOPS will require contractors to provide a list of equipment planned to be used with their specifications and current status of maintenance.
  - UNOPS will require contractors to provide third party testing certificates for equipment e.g., excavations and lifting equipment and licenses for operators and drivers.
  - UNOPS will require contractors to implement extra measures during COVID-19 Pandemic, including the following prevention measures to protect workers and will depend on emphasizing basic infection prevention measures and all contractors/suppliers should implement good hygiene and infection control practices

### HSSE Impacts Analysis Plan and Mitigation Measures

Potential Impact Factor	Mitigation Measure	Implementation Responsibility <sup>8</sup>	Estimated cost for each subproject (USD)
<b>Occupational Health and Safety</b>			
Working at Height Impact: Occupational fatalities and major injuries caused by falling from heights	<p>Ensure that the roof is well protected by proper parapet without openings and enough clean space.</p> <p>Ensure proper use of ladders and hiabs by trained workers. Equipment will be inspected and tested regularly by competent inspectors.</p> <p>Fall prevention devices, including safety belt and lanyard will be used to prevent access to fall hazard areas, or fall protection devices such as full body harnesses and head helmets used in conjunction with shock absorbing lanyards.</p> <p>Inspect ladders and their stability before Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area.</p> <p>Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an</p>	Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&S officer	1600\$

<sup>8</sup> The contractor is responsible of applying all UNOPS HSSE guidelines, SOPs and OHS requirements.

The UNOPS is responsible of supervising the contractor implementation of HSSE guidelines and OHS requirements.

	<p>arrested fall and a fall protection plan should be in place which includes the following aspects:</p> <p>Training and use of temporary fall prevention devices, such as rails or other barriers able to support a weight of 200 pounds, when working at heights equal or greater than two meters or at any height if the risk includes falling through an opening in a work surface.</p> <p>Training and use of personal fall arrest systems, such as full body harnesses and energy absorbing lanyards able to support 5000 pounds.</p>		
<p>Lifting Operations Impact: Failure of lifting equipment; Falling loads; and workers being crushed by a moving Load or lifting equipment which might result in fatalities or injuries.</p>	<p>Close the lifting area with fence to prevent access to the lifting area during lifting work.</p> <p>Install warning signs for lifting activities</p> <p>Prevent accessibility to non-workers at lifting zones or any construction zone</p> <p>Ensure safe distance from lifting sites and no worker is standing under lifting zone</p> <p>Carry out lifting work by well trained, qualified, and certified lifting team and with proper communication means and flagman.</p> <p>Provide workers with all necessary Personal Protective Equipment (PPE) and safety materials.</p> <p>Use well-maintained equipment for lifting that is appropriate for the weight; well checked and tested by a third party.</p> <p>Secure loads when lifting and use strong and reliable fixation materials to make sure that the</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>4000\$</p>

	<p>load is well tightened, and no solid parts fall from the load during lifting.</p> <p>Protect the units against staining, discoloration and other damage until they are installed in their final location.</p> <p>Lifting device capacity shall be 1.65 times the maximum calculated static load at that point.</p> <p>An ultimate load shall be <math>\geq 4</math> times the maximum static load.</p>		
<p>Electricity Shock Impact:</p> <p>Thermal burns</p> <p>Muscle, nerve and tissues damage due to electrical shock</p> <p>Fall from height due to sudden electric shock</p> <p>Fatalities or injuries</p>	<p>Inspect existing facility and apply all safety measures to prevent the risk of any injury to the workers by electricity shock during installation or to the users during operation and apply Hot Work Permit and Electricity Isolation Certificate subject to written approval by the UNOPS engineer provided before implementation of work.</p> <p>Carefully design using appropriate technologies to minimize hazards.</p> <p>Build security fences around electricity areas.</p> <p>Contractor electricians must be well trained and provided with appropriate insulated PPE and work tools and should be aware of electricity shocks and avoidance techniques.</p> <p>Avoid working during rainy times</p> <p>Install danger signage in the electrical hazard areas and apply all safety measures to prevent exposures.</p> <p>Ensure skilled and trained workers are hired for each job.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>NA</p>

	<p>Conduct regular awareness sessions and daily Toolbox Talks on OHS requirements before commencing any work.</p> <p>Periodic inspection to ensure that mitigation measures are implemented and stop any unsafe act or unsafe situation.</p> <p>Emergency response plan to be in place with details and contact of the nearest hospital or medical center,</p> <p>Responsibilities are understood for all works, First aid boxes are available and a list of trained first aiders is posted and known by all workers</p> <p>Immediately report all accidental occurrences with serious accident potential such as major equipment failures, contact with high-voltage lines, and exposure to hazardous materials, slides, or cave-ins to UNOPS</p> <p>Contractors shall monitor, keep records and report on the following environmental and social issues:</p> <ul style="list-style-type: none"> <li>• <i>Safety</i>: hours worked, lost time injury (LTI), lost workdays, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).</li> </ul>		
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	<ul style="list-style-type: none"> <li>• <i>Environmental incidents and near misses: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.</i></li> <li>• <i>Major works: those undertaken and completed, progress against project schedule, and key work fronts (work areas).</i></li> <li>• <i>ESHS requirements: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other ESHS requirements.</i></li> <li>• <i>ESHS inspections and audits: by Project Company, Independent Engineer, UNOPS and its implementing partners, or others—to include date, inspector or auditor name, sites visited, and records reviewed, major findings, and actions taken.</i></li> <li>• <i>Maintaining a record of injuries and accidents specifying cause and location</i></li> <li>• <i>Provide a list of trained workers, whom will be checked for their training skills. Measures will be implemented onsite and followed by regular monitoring visits.</i></li> <li>• <i>Ensuring the contractor is taking care of the safety of workers while working in the site and give all necessary vaccines to workers to prevent any infection with epidemic and pandemic diseases.</i></li> </ul>		
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<p>Manual Handling Impacts: Manual Handling Injuries that include Fractures Damage to muscles, ligaments and tendons Spinal disc injuries Trapped nerves Abrasions and cuts Burns Hernias.</p>	<p>Provide required information and training on manual handling to the site workers. Ensure applying safe handling techniques. Remove space constraints, ensure good housekeeping and provide improved layouts Keep manual handling to one level, improve floor conditions and improve the environmental conditions. The floor must be clean from any obstacles and well protected. Ensure use of appropriate PPE and safety materials. Addressing potential use of handling aids with matching safety measures.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>NA</p>
<p>Excavation Impact: Dust generated by excavation activities Waste generated from the excavation.</p>	<p>Excavation will be less than 50cm depth. Excavation area to be appropriately secured using barricades, fences and precaution tapes. Reflective Safety signs to be placed. Continuously remove the waste and transfer it to the approved disposal site by the local district authorities  Excavation activities will be away from facility public access way and will take place out of their working/ attendance hours.  Ensure workers are wearing PPEs and masks  Use dust sweeping methods and if necessary, use water for dust suppression, preferably greywater if available.</p>	<p>UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>NA</p>

<p>Injuries or fatalities that result from: Electric shock and fire flash burns.</p>	<p>UNOPS will ensure that contractor will provide workers with well insulated tools, instruments, devises and isolated PPE (gloves etc.). Electrical work will not be conducted unless an electric isolation certificate is issued to ensure all sources are dis-energized before commencing any electrical work. Ensure only qualified workers are handling electricity work.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>NA</p>
<p>Infection by Covid-19 Impact: Transmission of corona virus between site workers Site workers' lives could be at risk (Illness /Death).</p>	<p>UNOPS will ensure that contractors will provide health, safety and hygiene awareness and materials to staff, workers and visitors and provide proper training on health and hygiene issues. Contractor to maintain routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. When choosing cleaning chemicals, employers should follow the manufacturer's instructions for use of all cleaning and disinfection products (e.g., concentration, application method and contact time, PPE). Workers should wear masks, gloves and goggles at all times on the sites.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>800\$</p>
<p>Environmental pressures on workers (heat strokes, dust storms)</p>	<p>Not working during high temperatures and start the work early in the morning and working in calm weather conditions. Raise awareness on the importance of drinking enough water Provide proper PPEs against heat and dust</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer</p>	<p>NA</p>



	<p>Do not allow working during bad weather, rain, dust storms</p> <p>Provide adequate and suitable breaks and supply workers with drinking/potable water</p>		
Dealing with hazardous materials (i.e diesel)	<p>Ensure hazardous materials, and diesel fuel is stored in well-ventilated areas inaccessible to pedestrians and animals</p> <p>Ensure hazardous materials and fuel are stored according to their Materials Safety Data Sheets (MSDSs).</p> <p>Ensure fuel and generator are stored in well ventilated areas and properly insulated from the ground</p> <p>Ensure handling of chemicals and hazardous materials is carried out by trained workers</p> <p>Ensure fire prevention kits are present on site</p> <p>Ensure spill prevention kits are present on site</p> <p>Ensure workers spend limited time handling hazardous waste or materials</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden</p> <p>UNOPS ESSO and UNOPS H&amp;S officer</p>	\$500
<b>Environmental Impacts</b>			
Solid waste produced by work accumulated which pollutes the environment.	<p>Ensure that work wastes are properly stored at designated sites and regularly collected and transported to authorized disposal site and arrange for safe path of last destination of E-waste.</p> <p>Ensure waste areas are properly fenced and insulated.</p> <p>Ensure regular and proper housekeeping is maintained</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden</p> <p>UNOPS ESSO and UNOPS</p>	500\$

<p>Air pollution due to emissions from equipment/transportation trucks. that might result in: Mortality caused by cardiovascular and respiratory disease Lung cancer Chronic incidence caused by respiratory or cardiovascular disease Decline in physiologic functions Intrauterine growth restriction Environment Pollution</p>	<p>Visual observation and applying equipment checklist for inspection to ensure low emission and well-maintained equipment will be only used.  Provide workers with proper PPEs Use minimal water and preferably grey water for dust suppression. Use dust sweeping methods.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS and TPM</p>	<p>NA</p>
<p>GHG emissions</p>	<p>Ensure that panels and related equipment are sought from energy efficient dealers. The requirements for goods supply include Tier 1 financial ability, production quality and Good International Industry Practices (GIIP) including energy efficiency.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and TPM</p>	<p>NA</p>
<p>Ambient Noise impacts from machines, transport vehicles and workers.</p>	<p>Properly maintain equipment Ensure all work will be conducted during the day</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer and TPM</p>	<p>NA</p>
<p>Soil contamination from Diesel fuel and generator and hazardous materials</p>	<p>-Spill prevention kit shall be available on site in case of oil/fuel/diesel spills</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden</p>	<p>NA</p>

	<p>-Store diesel/oil/fuel in insulated areas to avoid leakage and soil contamination and according to its material safety data sheet (MSDS).</p> <p>Two tanks/containers should be provided for used oil and ensure safe disposal.</p> <p>Ensure the generator is installed on concrete base to avoid leaks on soil</p>	UNOPS ESSO and UNOPS H&S officer	
<b>Social Impact</b>			
Lack of workers awareness and knowledge on social safeguard issues on gender, SEA and GBV.	<p>Contractor and workers to sign the code of conduct, and ensure workers respect and adhere to the code of conduct.</p> <p>Conduct regular awareness sessions on site in GBV prevention.</p> <p>GM system is in place to handle any issue on Gender SEA and GBV.</p> <p>GM system for all workers including providing complaints box and complaint means.</p> <p>And the overall project GRM system is in place.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden.</p> <p>UNOPS ESSO and UNOPS Gender focal point</p>	500\$
Child Labor	<p>All workers should be more than 18 years old.</p> <p>Verifying age of workers by checking IDs and official documents.</p> <p>Ensure a worker log is available, and all workers are registered.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden.</p> <p>UNOPS ESSO and UNOPS gender focal point</p>	NA
Low aesthetic value	<p>Ensure proper waste management and good housekeeping is kept</p> <p>Ensure all construction materials are stored properly and away from the public</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden and Taiz. UNOPS ESSO</p>	NA

<p>Access of public into working site. Impacts: Public Exposure to high-risk activities (Lifting and Excavation).</p>	<p>Install barriers, danger warning signs and restriction signs indicating access to authorized persons only and signs showing the potential danger to the public. And establish barriers around the working site rooftop, equipment area and excavation area. Do not allow the public to access working sites. Avoid construction work during academic seasons Ensure proper storage of construction material and fencing the storage area to prevent accessibility.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer and TPM</p>	<p>500\$</p>
<p>Noise, nuisance.</p>	<p>The hospital facilities sections where the work will be conducted will not be in use during installation. And there is different entrance of workers isolated and fenced site. And no noisy work will take place (No welding or grinding allowed at site (Readymade and pre- framed outside the site mounting structures).</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden UNOPS ESSO and UNOPS H&amp;S officer and TPM</p>	<p>NA</p>
<p>Operation and maintenance</p>			
<p>Operation and Maintenance Staff (Health and Safety) may face risks of potential electric shock. Staff working at height face risks during cleaning/ inspection or general maintenance of the solar panels system.</p>	<p>Same mitigation measures for installation will apply for inspection and maintenance as well.</p>	<p>Contractor UWS-PMU/Aden and WSLC Aden. and Facility Administration.</p>	<p>NA</p>

<p>Operation and Maintenance (cleaning using water).</p>	<p>Ensure water is used efficiently while cleaning the panels in order to avoid wasting water. The solar panel cleaning will be wiper cleaning and water saving practice by using Rubber Blade water sprayers with very little amount of water for conservation of water.</p>	<p>Facility Administration.</p>	<p>NA</p>
<p>Waste management (e.g. solar PV panels)</p>	<p>Empty diesel/oil containers are stored in safe areas that are insulated and disposed of by certified contractors. -Ensure the presence of spill prevention kit  Ensure safe waste disposal of PV Solar Panels will be followed by the facility's administration after lifespan of PV Solar Panels elapsed.</p>	<p>Facility Administration</p>	<p>NA</p>

## 8. Environmental and social monitoring plan

### Environmental and Social Monitoring Plan

Indicator	Measurements (incl. methods & equipment) and indicators	Frequency	Implementation responsibility
<b>Community Health and Safety</b>			
Public safety during work.	<p><b>Method:</b> Visual observation and photographic documentation of safety measures. Visual observation for installing of warning signs, barricading of working area with safety tapes and fencing/barricades to prevent unauthorized access of public to the working site including workers' entrance.</p> <p><b>Indicator:</b> Number of grievances, number of recorded complaints, number of project recorded injuries and types of injuries and accidents</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden
Poor coordination, planning and sequencing of work could lead to breakage of underground pipes (electric power cables, telephone lines, water distribution.	<p>Inspection and photographic documentation. The contractor and UNOPS engineers should ensure that the site supervisor shall submit daily report on the movement of workers, approved and trained workers in place and conduct monitoring to ensure Permit to Work PTW and TBT applied and workers to be well informed about risks, mitigation measures and OHS requirements before commencing any work.</p> <p><b>Indicator:</b> Number of grievances, number of recorded complaints</p>	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden

The risk of employing children and forced labor for work activities.	<b>Method:</b> Site inspection, checking and documentation of contractor employee records and checking/verifying age documents. <b>Indicator:</b> Number of occurred cases of employing children (under 18 years of age) during the regular inspection.	Weekly during site inspection and regularly by TPM	Contractor, UNOPS and UWS-PMU/Aden , WSLC Adenand TPM
Low aesthetic value of landscape such as accumulation of waste and debris in the site.	Site inspection and documentation of general landscape Indicator: Presence of waste at undesignated zones Number of complaints related to wastes	Continuous/ Monthly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden
Stakeholder engagement:	Highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled elderly, children, etc.).	Continuous/ Monthly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Stakeholder grievances	Number of grievances and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken. Grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender disaggregated.	Continuous Monthly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden/Taiz.and TPM
Complaints Handling	Complaint register will be kept on site, and this will be fed into the GRM. Details of complaints received will be incorporated into the audits as part of the monitoring process.	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
GBV and SEA issues	Number of reported and registered cases of SEA/SH through project GM Number of reported cases of contractor’s noncompliance with SEA/SH obligations in work sites	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.and TPM

General Environmental Impacts			
Dust generation and air pollution during work implementation from equipment/transportation trucks.	<p><b>Method:</b> Visual observation and photographic documentation of equipment induced dust clouds during work activities.</p> <p><b>Indicator:</b> visible dust emissions</p>	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden
Increased level of noise and vibration.	<p>Supplier guaranty and warranty on the soundproof generator manufacturing specification to be mounted in a sound attenuated canopy, to reduce the noise level down to 84 dB(A) at a distance of 1 meter.</p> <p>Noise from generator will be monitored regularly during warranty period and after that.</p> <p>Indicator: Number of complaints related to noise Records of working during nighttime</p>	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Gaseous Emissions	Supplier guaranty and warranty on the manufacturing specification is to meet Tire 4 final emission standards and the emission from generator will be monitored regularly during warranty period and after that.	Continuous	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Production, proper disposal and disposal of work's debris and waste materials.	<p>Inspection and photographic documentation.</p> <p>Indicators: presence of waste at undesignated sites Presence of pests Number of complaints related to waste</p>	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Soil contamination from Oil and Fuel	Supplier guaranty and warranty on the manufacturing specifications are to be equipped with Fuel Oil Drip feature that allow safe and proper fuel filling and returning, and all Fuel /oil lines shall be provided with solid connections between fuel piping and engine.	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.



	<p>Oil discharge and safe disposal of lubricants will be monitored regularly during warranty period and after that.</p> <p>Method: Visual inspection on oil, fuel/diesel storage sites and spill inspection</p> <p><b>Indicator:</b></p> <p>Presence of spills</p> <p>Change in soil color</p>		
Waste generation, proper disposal and disposal of work's debris and waste materials.	Inspection and photographic documentation.	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Environmental incidents and near misses	<p>Records of environmental incidents and high potential near misses and how they have been addressed, how they have been reported, incidents review, and lessons learned.</p> <p>Monitoring working in good weather conditions.</p> <p>Number and types of recorded environmental misses</p>	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Operation and Maintenance (cleaning using water)	Visual inspection to ensure that water saving practice is implemented efficiently.	Weekly (After Installation)	Facility Administration
<b>Occupational Health and Safety</b>			
Working at Height Activities	<p>Visual inspection to ensure that all working at height activities are monitored and all safety associated instructions are implemented according to OSH requirements.</p> <p>Indicator: records of injuries from height activities</p>	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.

Lifting Operations	<p><b>Method:</b> Visual inspection to ensure that all lifting activities in the work site are executed safely and as per the standard lifting safety rules.</p> <p><b>Indicator:</b> Number of injured workers and the specific activity required PPE worker adherence.</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Electricity Work	<p><b>Method:</b> Visual inspection to ensure that all electricity safety rules are implemented, followed and communicated. Ensure that only skilled workers are authorized to perform any electrical operations.</p> <p><b>Indicator:</b> Number of injured workers from electrical shocks Number of workers not wearing suitable PPEs.</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Manual Handling	<p><b>Method:</b> Visual inspection to ensure that all manual handling activities are performed according to the OSH manual handling safety rules and instructions. Ensure that the implementation of the safety techniques to control the manual handling risk is monitored continuously.</p> <p><b>Indicator:</b> Number of injured workers and cause of injury number of workers not wearing proper PPEs.</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Excavation	<p>Visual inspection to ensure that all excavation activities are executed safely, and all safety rules are implemented.</p> <p>Indicators: Number of workers wearing masks</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Hazardous Substances and Wastes	<p><b>Method:</b> Visual inspection to ensure batteries are maintenance free and conduct regular monitoring.</p> <p><b>Indicators:</b> Presence of hazardous waste in undesignated zones</p>	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.

	Number of injuries cause by hazardous substances and wastes due to mishandling		
Infection by Covid-19	Visual inspection to ensure that health, safety and hygiene awareness are followed and communicated. Visual inspection to ensure that all health, safety and hygiene materials are provided. - Number of sick workers - Number of workers adhering to wearing PPEs through visual Inspection	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Operation and Maintenance (Staff Health and Safety)	Ensure that all operation and maintenance safety procedures and awareness are implemented, followed and monitored.	Continuous/Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Work related accidents and injuries.	<b>Method:</b> inspection and documentation <b>Indicator</b> in the records: number of injured workers and activity leading to injury	Continuous daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden/.
Poor onsite housekeeping, toilet and water supply, leading to illness and disease.	<b>Method:</b> Site inspection. Indicators: presence of pests, domestic waste located outside designated bins, soap and sanitizer not observed	Weekly during site inspection and regularly by TPM	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.

Safety	Hours worked, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases, first aid cases, high potential near misses, remedial and preventive measures required (for example, revised job safety analysis, new or different equipment, manual handling and skills training etc.	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Environmental incidents and near misses	Records of environmental incidents and high potential near misses and how they have been addressed, how they have been reported, incidents review, and lessons learned. Monitoring working in good weather conditions. Number and types of recorded environmental misses	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Major works:	Work undertaken and completed, progress against project schedule, and key work fronts (work areas).	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
E&S and OHS requirements:	Non-compliance with OHS requirements, national law (legal noncompliance), project commitments and E&S requirements.	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
E&S/OHS inspections and audits:	By contractor, engineer, or others, including authorities to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden
Workers:	Number of workers, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).	Continuous/ Daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Training on E&S issues	Including dates, number of trainees, and topics.	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden/Taiz.

Footprint management:	Details of any work outside boundaries or major off-site impacts caused by ongoing work—to include date, location, impact, and actions taken.	Continuous/ Monthly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Details of any security risks	Details of risks the contractor may be exposed to while performing its work—the threats may come from third parties external to the project	When occurred	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden.
Worker grievances:	Number of grievances and details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Details of complaints received will be incorporated into the audits as part of the monitoring process. Indicators: Number of complaints and types and number of solved complaints.	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. And TPM
Major changes to contractor's environmental and social practices.	Monitor and record contractor's environmental and social practices noncompliance through visual inspections.	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. And TPM
Deficiency and performance management	Actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or plans for actions to be taken—these should continue to be reported until UNOPS determines the issue is resolved satisfactorily.	Continuous/ Weekly	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden/.
<b>Operation and Maintenance</b>			

Operation and Maintenance (Staff Health and Safety and community health and safety)	Ensure same monitoring measures are implemented during operation and maintenance	Continuous daily	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. And Facility Administration.
Operation and Maintenance (training to facility staff)	Training on how to handle solar panels, clean them, proper PPEs and safety measures etc.	Prior to handing the project to the facility administration	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. and Facility Administration.
Training to facility staff on PV diesel systems.	Number of trainings received by facility workers.	Prior to handing over the operation PV diesel systems	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. and TPM
Training to facility staff on solar PV pumping systems.	Number of trainings received by facility workers.	Prior to handing over the operation PV pumping systems	Contractor, UNOPS and UWS-PMU/Aden , WSLC Aden. And TPM
Maintenance work	Follow same monitoring measures related to OHS safety during construction for relevant works.		Facility Administration
All costs will be the responsibility of each party including the contractor and will be included in the contract BoQ.			

## Annex 1: Design Requirements and Guidelines:

### Al-Taqaneyah Sewerage pumping Station

#### System Components:

The site has a specified design, specifications, quantities and civil works and additional units/loads (need to be operate by solar PV energy) detailed as annexes.

The contractor is also required to make sure that all required materials, equipment's; subsystem is included in his offer to deliver a completed and functional system, includes but not limited the following components:

Main Requirements	Components	
<b>Solar system for Deep-well submersible pumping Units</b>	Solar PV Panels Array	Y
	PV Combiner Box	Y
	Main DC connecting panel	Y
	Fixed Mounting Structure	Y
	Solar Pumping Inverter	Y
	AC & DC Cabling	Y
	AC & DC Grounding System	Y
	MDB	Y
	Levelling	Y
	Waste disposing	Y
<b>Solar Street Lighting System</b>	Solar Panel+ LED+ Control (Photocell)	Y
<b>Construction of billboard for project</b>		Y

As specified in the above table, the scope of works mainly shall include (but not be limited) to the following activities:

Supply, installation, operation and commissioning of solar PV system solution with all accessories to operate the existing submersible sewer motor-pump sets in Al-Taqaneyah Sewerage Station.

Supply, installation, operation and commissioning of solar street lighting system which will be distributed and installed on all sites in order to enhance night protection and monitoring of solar panels at these locations.

The details of above works will be listed below as well as the technical specifications, quantities and drawings.

Supply and execute all required civil works according to technical document and the engineer's instructions.

#### **Standards:**

All goods shall comply with the requirements of the latest issue (with up-to-date amendments) of the appropriate standard or standards of the American Society for Testing of Material (ASTM) British Standards Institution (BS) or International Organization for Standardization (ISO) standards, German Standards (DIN) or their equivalents as approved by the Purchaser. Once the Bid has been accepted and a Contract awarded, the successful Bidder shall furnish two (2) original copies of the standards with which the goods are complying in English. If the original standards are in a language other than English, then authenticated English translations must be submitted in addition. Where reference is made to a particular manufacturer's product, such reference shall be taken only as an indication of design and quality unless otherwise stated.

All materials used in the construction of systems are to be suitable for envisaged duties as described in the specifications below. All materials used are to conform to the latest requirements of the appropriate EN, NEMA or BS specification or any other reputable international standard (as specified in technical specifications). During evaluation special consideration shall be given to material choice and quality.

All parts of the units in contact with the **Sewer** must be manufactured from materials which are resistant to internal and external corrosion (**ammonia corrosion**), or protected from corrosion by a suitable and safe surface treatment.

#### **Submittals:**

##### **All offers must include the following items:**

The original certificate for all supplied items

The authorization of manufacturer

Performance tests certificate from the manufacturer

Recommended and priced special tools

All original and completed catalogues for each supplied item

At least one-year warranty from the operation date of each supplied items. (any other warranty will not be accepted)

Service and parts manuals

Detailed work implementation plan should be submitted along with the offer.

In addition to that, the tenderers are requested to present information along with their offers as follows:

Information on proper representative and/or local workshop/dealership for back-up service/repair and maintenance/spare parts, etc, including their names and addresses.

Quote for service parts for each unit of equipment.



These specifications describe the basic requirements for goods. Tenderers are requested to submit with their offers the detailed specifications, drawings, catalogues, etc. for the products they intend to supply.

Any tender not containing sufficient descriptive material to describe the proposed equipment / components of the system may be treated as incomplete and hence may be rejected. Such descriptive materials and specifications submitted will be retained. Any big deviations from these will not be accepted.

Relevant original descriptive literature of the Goods showing conformity to the technical specifications must be provided with the bid. Irrelevant literature downloaded from the Internet shall not be accepted.

**Project Execution**

Once the project is awarded, the contractor is entitled to carry out detailed site visit, site survey with PMU Aden/ UNOPS representative to identify component's locations, cabling routing, and any other necessary works;

A Regular status meeting with PMU Aden/ UNOPS representative shall be carried out to discuss current and planned activities and significant issues;

The contractor has to submit the final a stamped design and shop-drawings to be verified and approved by PMU Aden/ UNOPS.

The Contractor must provide work installation plan and implementation period such has to be approved by PMU Aden/ UNOPS.

Weekly series Work team	1	2	3	4	5	6	7	....	....	19	20	21	22	23	24
The Contractor shall visit well locations site before provide the tender submission preferred;															
Submit work plan with tender document															
Site visit by contractor															

submit the final a stamped drawing and design to be verified by UNOPS.															
Site levelling,															
Supply installation															

**Manuals, Catalogues and Electrical & Structural Drawings**

Bidder shall submit catalogues and data sheets of all the offered PV systems equipment with detailed technical specifications for the proposed systems and components. In addition, the contractor shall submit all required doc’s such as Shop Drawings, catalogues, factor acceptance tests, test reports by other accredited parties. The offered PV systems shall be capable to operate in the climatic site conditions ensuring the system sustainability and durability

All as built drawings and layout shall be prepared using AutoCAD including but not limited to: as belt drawing, PV layout, cable routing, and structural design pumping system layout;

**Manufacturers:**

Submit with the Bid detailed product specifications, performance characteristics and catalogues with manufacturer’s names and model numbers for all materials and equipment to be supplied. No alternation to the products proposed and approved will be permitted without the express written approval of the Purchaser or his authorized representative.

**Markings:**

Unless otherwise specified in the relevant standard, products are to have the following legible marks as appropriate, cast, stamped or indelibly painted:

Manufacturer’s name, initials and identification mark.

Class designation.

Date of manufacture.

Initials and number of relevant standards.

**Construction**

Contractor shall implement its standard Quality Assurance / Quality Control plan for construction activities on the Project Site;

The contractor shall supply all labor, tools, machinery, equipment and equipment transportation for all work;

The contractor shall keep the site clean and orderly throughout the duration of construction;

The contractor shall provide permanent equipment marking, labelling and signage for the project;

The contractor shall fully comply with all applicable notification, safety and work rules when working

It is the contractor responsibility to clean the modules once the construction work is completed

### **Structural Work**

The contractor should take into account the site condition in terms of obstacles and shadings;

The contractor has to provide a stamped drawing and design verified from a reputable engineering office; such office has to be approved by PMU Aden/ UNOPS.

### **Electrical Work**

All grounding and protection equipment throughout the system shall be sized and specified to reduce damage on all components, such system shall be approved by PMU Aden/ UNOPS;

The contractor shall install all the required components required for data logging and monitoring;

All electrical works shall comply with the manufacture instructions and regulations;

System configuration, testing and commissioning should be carried out by an experienced electrical engineer.

### **System Training:**

The awarded contractor shall carry our comprehensive training for 2 personnel where the solar system will be installed, the training will be focusing on system operation, maintenance and troubleshooting, the training scope shall be approved by UNOPS, the activities shall include but not limited to the following:

Solar pump operation

Solar Inverter operation

System isolation

System monitoring

Fault diagnosis

Safety and emergency shutdown procedure

User manuals, operation manuals and drawings must be provided in Arabic and in English.

### **Commissioning**

The contractor shall provide a time plan and test procedure for the process of commissioning;

The contractor shall offer all goods and materials for inspection examination and witness testing. He shall inform the UNOPS or his authorized representative of the date when the goods and materials will be ready for inspection and witness testing. If the tests are beyond the resources of the supplier, he shall make arrangements for these to be carried out elsewhere;

Such testing should include the following tests as minimum:

Cable insulation and continuity test: such tests should be carried before commencing installation;

System earthing test: The earth resistance should be measured to ensure operators safety;

**Module testing which includes the following:**

Checking the cleanness of surface (glass) area of the module as it should be free of any dirt and dust;

PV modules Visual Inspection: A visual inspection of the modules should be done to check for defects in the modules such as cracks, chips, de-lamination, fogged glazing, and discoloration, this should be done for the front glass and back sheet;

PV modules connector and cable Inspection: Check the sealing gels of the junction box to ensure it have no crack or crevice;

Ensure that all modules have been tested before shipping by double checking the flash reports;

DC voltage measurement: This can be done either on the modules level or on combiner box level;

**Inverter**

Ensuring that all components are free of dust, if not, a dry cloth should be used to wipe away any accumulated dirt/dust;

A visual inspection for any damages in device enclosure also inspects the nameplate of inverter and compare with the tender required rating.

**PV Combiner box panels**

Inspect the enclosure material, outer insulation layer, panel door lock, cable glands and gas jacket

Visual inspect the rating of all internal component (fuses, DC CB, blocking diodes of panels and compare with required ratings and ensure that all required(tender) component of panels are available

Inspect the available of guide / instruction and warning labels inside

Inspect the clearness between al panel's component if adequate of.

not especially if the panels are collected locally

***Project Staff:***

The bidders Should provide the following key personnel under the project.

Project Manager: Project Manager: With 5 years' experience as a Project Manager, the Project Manager shall be responsible for the successful management of assigned project, its technical quality, schedule, logistics, project staff coordination, client communications, negotiating scopes and fees, billing and client follow-up maintenance.

Project Engineer: With a Bachelor's Degree in Electrical Engineering from a reputable University; with at least (5) Years of experience of work in electrical, civil or construction works management including minimum of (3) years of works in similar nature and magnitude of works. The Project Engineer shall perform field engineer duties including all setting out and applies the design as well as liaising with and working alongside the engineers and sub-contractors. He shares responsibility for site security, health and safety, and the organization and supervision of material and human resources in the field. Ensure that material and placement comply with the technical specifications, will analyses failure, and implement corrective and preventive action to ensure contracted quality is provided, creates and maintains quality documentation, such as quality manuals, quality procedures, etc., is responsible for planning, and carrying all required tests for using quality material and their placement, continuously improving QA receiving inspection process and procedures, and prepares QA/QC reports.

### **Fire Extinguisher**

- A portable fire extinguisher shall be provided, 2 extinguishers for each facility should be supplied one to be placed near to the control room and the other one placed near the MDB;
- Fire extinguisher 1: 5 kg carbon dioxide (CO<sub>2</sub>);
- Fire extinguisher2: 6 kg powder;
- Warranty: at least two years.

### **Smoke & Heat Detector**

- Shall be located inside the control room;
- Include button for false alert;
- Battery life not less than three years;
- Warning sound delivers sounds of >85 Db.
- PVC pipe type: High quality heat rated PVC pipes and accesses

### **Danger Labels and Signage**

- Awarded Bidders are entitled to provide outdoor, sun proof danger signage where necessary including but not limited to, solar inverter, and junction box(s).
- Size and test of the signage shall be finalized in consultation with UNOPS engineer.

## Annex 2: GRM Complaint and Suggestion Form

Yemen Emergency Human Capital  
Project (YEHCP)  
Sample of GRM  
Complaint and Suggestion Form

ستمارة توثيق ومتابعة شكاوى المستفيدين  
من مشروع رأس المال البشري الطارئ في  
اليمن نموذج لآلية التظلمات والشكاوى

مشروع رأس المال البشري الطارئ في اليمن  
نموذج لآلية التظلمات والشكاوى

### "Documenting and Monitoring Complaints Form of

### Beneficiaries of Yemen Emergency Human Capital Project (YEHCP) "

			الاسم الثلاثي للمستفيد: Beneficiary Name
	رقم الهاتف للمتابعة Tel Number for follow up		رقم البطاقة الشخصية: ID No.
			العنوان الدائم: Permanent Address
			اسم النشاط المنفذ (مركز/وحدة) Name of Activity under implementation
المحافظة: Governorate	المديرية: District	القرية: Village	مكان تنفيذ النشاط: Place of activity under implementation

أخرى Other	مالية Financial	فنية Technical	إدارية Administrative	نوع الشكاوى Complaint Type

موضوع الشكاوى:

**Complaint Subject**

		الوضع الحالي: Current Situation
		أسباب المشكلة:

		Reason of the problem
	توقيع صاحب الشكوى: Complainant Signature	التاريخ: Date

- الجهة التي يجب أن يقدم لها الشكوى: .. UNOPS – Tool Free No 8000190 Tel: 01 504914/915 - SMS: 739888388 Email: GRM.yemen@unops.org.....

The entity, which the complaint should be forwarded to:

.....:الرأي في جدية الشكوى:-

Opinion on the seriousness of the complaint

.....:الجهة المحول لها الشكوى:-

The complaint transferred to

.....:المدة الزمنية اللازمة للبت في الشكوى:-

Time required for response

.....:مدى رضى المستفيد عن الاستجابة لحل شكواه:-

Satisfaction of beneficiary in responding to his/her complaint

		الإجراءات المتخذة : Action taken
	التاريخ: Date	ماترتب عليها من نتائج: The results of the action taken

.....:اسم مستلم الشكوى ووظيفته:-

Name of person received the complaint and his/her position

توقيع الموظف المختص / Signature

..... : التاريخ / Date

.....:

## Annex 3: Environmental and Social Requirements for Contractors

These requirements for contractors are generic and clauses applied as relevant to each sub-project.

Contractors shall meet the following Environmental, Health, Safety and Social (including labor) requirements – thereafter called ESHS requirements<sup>9</sup>.

The ESHS requirements include 10 sections

1. Contractor Environmental and Social Management Plan (C-ESMP)
2. ESHS Training
3. Construction Site Management
4. Occupational Health and Safety (OHS)
5. Road safety and Traffic Safety
6. Chance Find Procedures
7. Emergency Preparedness and Response
8. Stakeholder Engagement
9. Code of Conduct
10. Contractor Environmental and Social Reporting

### Contractor Environmental and Social Management Plan (C-ESMP)

- Prepare and submit to UNOPS for approval a Contractor Environmental and Social I and Social Management Plan (C-ESMP).
- Include in the C-ESMP a detailed explanation of how the contractor's performance will meet the ESHS requirements.
- Ensure that sufficient funds are budgeted to meet the ESHS requirements, and that sufficient capacity is in place to oversee, monitor and report on C-ESMP performance.
- Put in place controls and procedures to manage their ESHS performance.
- Get prior written approval from UNOPS Engineers before starting construction or rehabilitation activities.

### ESHS Training

- Determine ESHS training needs in collaboration with UNOPS.
- Maintain records of all ESHS training, orientation, and induction.
- Ensure, through appropriate contract specifications and monitoring that service providers, as well as contracted and subcontracted labor, are trained adequately before assignments begin.
- Demonstrate that its employees are competent to carry out their activities and duties safely. For this purpose, the Contractor shall issue a Competence Certificate for every person working on site (relative to aspect of work assignment) that specifies which tasks can be undertaken by which key personnel.

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<sup>9</sup>The ESHS requirements build on the General EHS Guidelines of the World Bank Group, but also take into account other World Bank guidelines, and good practice notes



## Orientation Training

- Provide ESHS orientation training to all employees, including management, supervisors, and workers, as well as to subcontractors, so that they are apprised of the basic site rules of work at/on the site and of personal protection and preventing injury to fellow employees.
- Training should consist of basic hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training.

## Visitor Orientation

- Establish an orientation program for visitors, including vendors that could access areas where hazardous conditions or substances may be present.
- Visitors shall not enter hazard areas unescorted.
- Ensure that visitors shall always be accompanied by an authorized member of the contractor, or a representative of UNOPS or of its implementing partners, who has successfully fulfilled the ESHS orientation training, and who is familiar with the project site construction hazards, layout, and restricted working areas.

## New Task Employee and Contractor Training

- Ensure that all workers and subcontractors, prior to commencement of new assignments, have received adequate training and information enabling them to understand work hazards and to protect their health from hazardous ambient factors that may be present. The training should adequately cover the step by step process that is needed for Project activities to be undertaken safely, with minimum harm to the environment, including:
  - Knowledge of materials, equipment, and tools.
  - Known hazards in the operations and how they are controlled.
  - Potential risks to health.
  - Precautions to prevent exposure.
  - Hygiene requirements.
  - Wearing and use of protective equipment and clothing.
  - Appropriate response to operation extremes, incidents and accidents.

## Construction Site Management

### Vegetation

- Prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the construction site.
- Protect all trees and vegetation from damage by construction operations and equipment, except where clearing is required for permanent works, approved construction roads, or excavation operations.
- Re-vegetate damaged areas on completion of the Works, and for areas that cannot be revegetated, scarifying the work area to a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.
- Use, as much as possible, local species for replanting and species that are not listed as a noxious weed or invasive species.

- Repair, replant, reseed or otherwise correct, as directed by UNOPS or its representative, and at the Contractor's own expense, all unnecessary destruction, scarring, damage, or defacing of the landscape resulting from the Contractor's operations.
- Transport labor and equipment in a manner to avoid as much as possible damage to grazing land, crops, and property.

### Protection of the Existing Installations

- Safeguard all existing buildings, structures, works, pipes, cables, sewers, or other services or installations from harm, disturbance or deterioration during construction activities.
- Coordinate with local authorities to identify existing infrastructure that might not be visible.
- Repair any damage caused by the Contractor's activities, in coordination with concerned authorities.
- Take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of properties to the construction activities, and more generally to the public.
- Maintain safe access to public and private properties that might be affected by construction activities. If necessary, provide acceptable alternative means of passage or access to the satisfaction of the persons affected.
- Avoid working during night hours.

### Waste from Construction Activities

- Collect and properly store and manage all solid wastes and hazardous wastes resulting from the construction activities, including construction debris and spoils, to prevent the contamination of soil and groundwater. Hazardous E-waste should be managed stored and disposed according to widely accepted guidelines. In case chemicals are present they should be stored and disposed according to their Material Safety Data Sheets (MSDSs)
- Remove unneeded excavation material from construction sites as soon as possible.
- Agree with relevant municipalities about solid waste disposal during construction.
- Carefully select waste disposal sites, to be approved by UNOPS or its implementing partner.
- Minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials, and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials or debris.
- Transfer construction waste to assigned places in the selected waste disposal sites with documented confirmation.
- Properly dispose of solid waste and hazardous wastes and debris at designated permitted sites waste disposal sites allocated by the local authorities, and obtain a receipt of waste from the authorized landfill authority.

### Air Quality

The Contractor shall:

- Use dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls, including air extraction and treatment through a bag house or cyclone for material handling sources, such as conveyors and bins.

- Use water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-products is not a recommended method to control road dust.
- Use wheel washes at quarries, ready-mix plants, construction sites, and other facilities to prevent track-out of mud, dust and dirt on to public road.
- Regularly clean road surfaces within the construction sites to remove accumulated fine material, and regularly clean transportation vehicles.
- Cover open bodied trucks handling sand, gravel or earth.
- Minimize smoke from diesel engines by regular and proper maintenance, in particular by ensuring that the engine, injection system and air cleaners are in good condition.

## Hazardous and Toxic Materials

The Contractor shall take precautions relative to the conditions specified herein.

- Train workers regarding the handling of hazardous materials.
- Store hazardous materials as per the statutory provisions of the Manufactures, Storage and Import of Hazardous Chemicals Rules (1989), under the Environment (Protection) Act, 1986.
- Provide adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids.
- Use impervious surfaces for refueling areas and other fluid transfer areas.
- Train workers on the correct transfer and handling of fuels and chemicals and the response to spills.
- Provide portable spill containment and cleanup equipment on site and training in the equipment deployment.
- Deposit or discharge toxic liquids, chemicals, fuels, lubricants and bitumen into containers for salvage or subsequent removal to off-site locations.
- Treat hazardous waste separately from other waste.
- Avoid the storage or handling of toxic liquid adjacent to or draining into drainage facilities.
- Keep absorbent materials or compounds on Site in sufficient quantities corresponding to the extent of possible spills.
- Locate landfill pits for the disposal of solid waste at least 100 m from water courses, and fencing them off from local populations.
- Ensure adequate primary treatment of sanitation effluents and installing septic tanks away from village watering points.

## Area Signage

- Appropriately mark hazardous areas.
- Install warning signs
- Ensure that signage is in accordance with international standards and is well known to, and easily understood by workers, visitors and the general public as appropriate.
- Demarcate work sites with safety tape, fencing or barricades, as appropriate, to prevent unauthorized access to the construction sites
- Safeguard public safety by covering holes and by installing guardrails along temporary pathways.

## Health and Safety

### Severe Weather and Facility Shutdown

- Design and build work place structures to withstand the expected elements for the region and designate an area designated for safe refuge, if appropriate.
- Develop Standard Operating Procedures (SOPs) for project or process shut-down, including an evacuation plan.

### Lavatories and Showers

- Provide adequate lavatory facilities (toilets and washing areas) for the number of people expected to work at the construction sites, and make allowances for segregated facilities, and for indicating whether the toilet facility is “In Use” or “Vacant”.
- Provide toilet facilities with adequate supplies of hot and cold running water, soap, and hand drying devices.
- Where workers may be exposed to substances poisonous by ingestion and skin contamination may occur, provide facilities for showering and changing into and out of street and work clothes.

### Potable Water Supply

- Provide adequate supplies of potable drinking water from a fountain with an upward jet or with a sanitary means of collecting the water for the purposes of drinking
- Ensure that water supplied to areas of food preparation or for the purpose of personal hygiene (washing or bathing) meets drinking water quality standards

### Clean Eating Area

- Where there is potential for exposure to substances poisonous by ingestion, make suitable arrangements to provide clean eating areas where workers are not exposed to the hazardous or noxious substances.

### Personal Protective Equipment (PPE)

- Identify and provide at no cost appropriate PPE to workers, the workers of subcontractors, as well as to visitors, which gives adequate protection without incurring unnecessary inconvenience to the individual.
- Ensure that the use of PPE is compulsory.
- Provide sufficient training in the use, storage and maintenance of PPE to its workers and workers of its subcontractors.
- Properly maintain PPE, including cleaning when dirty and replacement when damaged or worn out;
- Determine requirements for standard and/or task-specific PPE based on of Job specific Safety Analysis (JSA).
- Consider the use of PPE as a last resort when it comes to hazard control and prevention, and always refer to the hierarchy of hazard controls when planning a safety process.

### Noise

Institute appropriate measures to reduce the exposure of workers to construction noise, including but not limited to:

- Avoid exposure to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C).
- Enforce the use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A).
- Provide hearing protective devices capable of reducing sound levels at the ear to at most 85 dB(A).
- Reduce the “allowed” exposure period or duration by 50 percent for every 3 dB(A) increase in excess of 85 dB(A).
- Perform periodic medical hearing checks on workers exposed to high noise levels.
- Rotate staff to limit individual exposure to high levels.
- Install practical acoustical attenuation on construction equipment, such as mufflers.
  - Use silenced air compressors and power generators
  - Keep all machinery in good conditions.
  - Install exhaust silencing equipment on bulldozers, compactors, crane, dump trucks, excavators, graders, loaders, scrapers and shovels.
- Post signs in all area where the sound pressure level exceeds 85 dB(A).
- Shut down equipment when not directly in use.
- Provide advance notice to occupants if an activity involving high level impact noise is in close proximity to buildings.

## First Aid and Accidents

- Ensure that qualified first-aid by qualified personnel is always available. Appropriately equipped first-aid stations should be easily accessible throughout the place of work.
- Provide workers with rescue and first-aid duties with dedicated training so as not to inadvertently aggravate exposures and health hazards to themselves or their co-workers. Training would include the risks of becoming infected with blood-borne pathogens through contact with bodily fluids and tissue.
- Provide eye-wash stations and/or emergency showers close to all workstations where immediate flushing with water is the recommended first-aid response.
- Provide dedicated and appropriately equipped first-aid room(s) where the scale of work or the type of activity being carried out so requires.
- Equip first aid stations and rooms with gloves, gowns, and masks for protection against direct contact with blood and other body fluids.
- Make widely available written emergency procedures for dealing with cases of trauma or serious illness, including procedures for transferring patient care to an appropriate medical facility.
- Immediately report all accidental occurrences with serious accident potential such as major equipment failures, contact with high-voltage lines, and exposure to hazardous materials, slides, or cave-ins to UNOPS.
- Immediately investigate any serious or fatal injury or disease caused by the progress of work by the Contractor, and submit a comprehensive report to UNOPS.

## Communicable Diseases

The Contractor shall implement a combination of behavioral and environmental modifications to mitigate communicable diseases:

- Conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all construction site staff (including all the Contractor's employees, all subcontractors of any tier, consultants' employees working on the site, and truck drivers and crew making deliveries to the site for Works and Services executed under the Contract, concerning the risks, dangers and impact, and appropriate avoidance behavior of communicable diseases.
- Provide treatment through standard case management in on-site or community health care facilities.
- Ensure ready access to medical treatment, confidentiality and appropriate care, particularly with respect to migrant workers.
- Promote collaboration with local authorities to enhance access of workers families and the community to public health services and ensure the immunization of workers against common and locally prevalent diseases.
- Provide basic education on the conditions that allow the spread of other diseases such as COVID-19, Lassa fever, Cholera and Ebola. The training should cover sanitary hygiene education.
- Prevent illness in immediate local communities by:
  - Implementing an information strategy to reinforce person-to-person counselling addressing systemic factors that can influence individual behavior as well as promoting individual protection, and protecting others from infection.
  - Training by health workers in disease treatment.
  - Conducting immunization programs for workers in local communities to improve health and guard against infection.
  - Providing health services.

## COVID-19

In the context of the COVID-19 pandemic, Contractors shall develop and implement measures to prevent or minimize an outbreak of COVID-19, and develop procedures indicating what should be done if a worker gets sick. The measures shall include:

- Assessing the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk.
- Confirming that workers are fit for work, including temperature testing and refusing entry to sick workers.
- Considering ways to minimize entry/exit to site or the workplace, and limiting contact between workers and the community/general public
- Training workers on hygiene and other preventative measures, and implementing a communication strategy for regular updates on COVID-19 related issues and the status of affected workers.
- Treating workers who are or should be self-isolating and/or are displaying symptoms
- Assessing risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- Reducing, storing and disposing of medical waste
- Adjusting work practices, to reduce the number of workers and increase social distancing

- Expanding health facilities on-site compared to usual levels, developing relationships with local health care facilities and organize for the treatment of sick workers
- Building worker accommodations further apart, or having one worker accommodation in a more isolated area, which may be easily converted to quarantine and treatment facilities, if needed
- Establishing a procedure to follow if a worker becomes sick (following WHO guidelines)
- Implementing a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on the site.

## Vector-Borne Diseases

Reducing the impact of vector-borne disease on the long-term health of workers is best accomplished by implementing diverse interventions aimed at eliminating the factors that lead to disease. The Contractor, in close collaboration with community health authorities, shall implement an integrated control strategy for mosquito and other arthropod-borne diseases that includes the following measures:

- Prevent of larval and adult propagation through sanitary improvements and elimination of breeding habitats close to human settlements
- Eliminate unusable impounded water
- Increase water velocity in natural and artificial channels
- Consider the application of residual insecticide to dormitory walls
- Implement integrated vector control programs
- Promote the use of repellents, clothing, netting, and other barriers to prevent insect bites
- Use chemoprophylaxis drugs by non-immune workers and collaborating with public health officials to help eradicate disease reservoirs
- Monitor and treat circulating and migrating populations to prevent disease reservoir spread
- Collaborate and exchange in-kind services with other control programs in the project area to maximize beneficial effects
- Educate project personnel and area residents on risks, prevention, and available treatment
- Monitor communities during high-risk seasons to detect and treat cases
- Distribute appropriate education materials
- Follow safety guidelines for the storage, transport, and distribution of pesticides to minimize the potential for misuse, spills, and accidental human exposure

## Road safety and Traffic Safety

The Contractor shall ensure traffic safety by all project personnel during displacement to and from the workplace, and during the operation of project equipment on private or public roads. The Contractor shall adopt best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public, including:

- Emphasize safety aspects among drivers.
- Improve driving skills and requiring licensing of drivers.
- Institute defensive driving training for all drivers prior to starting their job.
- Adopt limits for trip duration and arranging driver rosters to avoid overtiredness.
- Avoid dangerous routes and times of day to reduce the risk of accidents.
- Use speed control devices (governors) on trucks, and remote monitoring of driver actions.
- Require that drivers and co-passengers wear seatbelts, and duly sanction defaulters.

- Regularly maintain vehicles and use manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.

Where the project may contribute to significant changes in traffic along existing roads the contractor shall:

- Commence activities that affect public motorways and highways, only after all traffic safety measures necessitated by the activities are fully operational.
- Arrange diversions for providing alternative routes for transport and/or pedestrians.
- Minimize pedestrian interaction with construction vehicles, particularly at crossing points to schools, markets, and any animal crossing points of significance, through appropriate signage, engineered footpaths or traffic slowing devices.
- Organize meaningful road accident awareness events at all roadside schools and communities within 150 meters of the road centerline, covering safe road crossing, road accident hazards from weather conditions and vehicle roadworthiness, overloading and driver alertness, dangers posed by parked and broken-down vehicles, etc.
- Collaborate with local communities and responsible authorities to improve signage, visibility and overall safety of roads, particularly along stretches located near schools or other locations where children may be present.
- Collaborate with local communities on education about traffic and pedestrian safety (e.g. school education campaigns).
- Coordinate with emergency responders to ensure that appropriate first aid is provided to all affected persons in the event of accidents.
- Use locally sourced materials, whenever possible, to minimize transport distances, and locate associated facilities such as worker camps close to project sites.
- Employ safe traffic control measures, including road signs, traffic cones, removable barriers, and flag persons to warn of dangerous conditions.

## Emergencies

- Establish and maintain an emergency preparedness and response system, in collaboration with appropriate and relevant third parties including to cover: (i) the contingencies that could affect personnel and facilities of the project to be financed; (ii) the need to protect the health and safety of project workers; (iii) the need to protect the health and safety of the Affected Communities. The emergency preparedness and response system shall include:
  - Identification of the emergency scenarios.
  - Specific emergency response procedures.
  - Training of emergency response teams.
  - Emergency contacts and communication systems/protocols (including communication with Affected Communities when necessary).
  - Procedures for interaction with government authorities (emergency, health, environmental authorities).
  - Permanently stationed emergency equipment and facilities (e.g., first aid stations, firefighting equipment, spill response equipment, personal protection equipment for the emergency response teams).
  - Protocols for the use of the emergency equipment and facilities.



Clear identification of evacuation routes and muster points.

Emergency drills and their periodicity based on assigned emergency levels or tiers.

Decontamination procedures and means to proceed with urgent remedial measures to contain, limit and reduce pollution within the physical boundaries of the project property and assets to the extent possible.

## Stakeholder Engagement

The Project Company will be required to undertake a process of stakeholder engagement with representative persons and communities directly affected by the activities it undertakes, including if necessary, the public disclosure of its C-ESMP. The Project Company shall also maintain throughout the Project good relations with local communities and will give these communities prior notice of plans and schedules as they might affect local people.

The stakeholder engagement process will also be applicable in the event of land acquisition associated with changes in the footprint of activities.

## Labor Force Management

### Labor Conditions

- Implement the measures and commitments defined in the Labor Management Procedures. A copy of the LMP can be found in the Project ESMF
- Provide all workers with terms and conditions that comply with Yemeni Labor Legislation, most particularly Decree 5/1995) and applicable International Labor Organization conventions on workplace conditions.

### Insurance

- Provide insurance for call employees involved in onsite activities, as indicated by Yemen's Labor Law
- Compensate any employee for death or injury, except to the extent that liability arises from the

## Protection from Sexual Exploitation and Abuse

- Provide repeated training and awareness raising to the workforce about refraining from unacceptable conduct toward local community members, specifically women.
- Inform workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted.
- Prohibit its employees from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging any sexual activities that are exploitive or degrading to any person.
- Develop a system to capture gender-based violence, sexual exploitation and workplace sexual harassment related complaints/issues.
- Adopt a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

## Protection from Child Labor

- Verify that workers are older than 18 when hiring.

- Exclude all persons under the age of 18.
- Review and retain copies of verifiable documentation concerning the age of workers.

## Code of Conduct

Contractors shall ensure that all employees, including those of subcontractors, are informed about and sign the following Code of Conduct:

### **CODE OF CONDUCT FOR CONTRACTOR’S PERSONNEL**

We the Contractor [enter name of Contractor] have signed a contract with UNOPS for [enter description of the activities]. These activities will be carried out at [enter the Site and other locations where the activities will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the activities, including the risks of sexual exploitation and assault and gender-based violence.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the activities. It applies to all our staff, including laborers and other employees at the at all the places where the activities are being carried out. It also applies to the personnel of every subcontractor and any other personnel assisting us in the execution of the activities. All such persons are referred to as “Contractor’s Personnel” and are subject to this Code of Conduct.

***This Code of Conduct identifies the behavior that we require from all Contractor’s Personnel.***

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

### **Required Conduct**

Contractor’s Personnel shall:

carry out his/her duties competently and diligently.

comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor’s Personnel and any other person.

maintain a safe working environment including by:

ensuring that workplaces, machinery, equipment and processes under each person’s control are safe and without risk to health.

wearing required personal protective equipment.

using appropriate measures relating to chemical, physical and biological substances and agents; and

following applicable emergency operating procedures.

report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health.

treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children.

not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other unwanted verbal or physical conduct of a sexual nature with other Contractor’s or Employer’s Personnel.

not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed projects,

sexual exploitation occurs when access to or benefit from Bank financed Goods, Works, Consulting or Non-consulting services is used to extract sexual gain.

not engage in Sexual Assault, which means sexual activity with another person who does not consent. It is a violation of bodily integrity and sexual autonomy and is broader than narrower conceptions of “rape”, especially because (a) it may be committed by other means than force or violence, and (b) it does not necessarily entail penetration.

not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage.

complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Assault (SEA).

report violations of this Code of Conduct; and

Not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the [Project Grievance [Redress] Mechanism].

### **Raising Concerns**

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contacting the Individual designated by the Contractor [enter name of Contact]
2. In writing at this address [ ]
3. By telephone at [ ]
4. In person at [ ]
5. Calling [ ] to reach the Contractor’s hotline and leave a message (if available)

The person’s identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

### **Consequences of Violating the Code of Conduct**

Any violation of this Code of Conduct by Contractor’s Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

### **For Contractor’s Personnel**

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor’s contact person with relevant experience in handling gender-based violence] requesting an explanation.

Name of Contractor’s Personnel: [insert name]

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

A copy of the code shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in languages comprehensible to the local community, Contractor's personnel (including sub-contractors and day workers), Project Company's and Project Manager's Personnel, and affected persons.]

## Contractor Environmental and Social Reporting

Contractors shall monitor, keep records and report on the following environmental and social issues:

- *Safety*: hours worked, lost time injury (LTI), lost workdays, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
- *Environmental incidents and near misses*: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
- *Major works*: those undertaken and completed, progress against project schedule, and key work fronts (work areas).
- *ESHS requirements*: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other ESHS requirements.
- *ESHS inspections and audits*: by Project Company, Independent Engineer, UNOPS and its implementing partners, or others—to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.
- *Workers*: list of workers at each site, confirmation of ESHS training, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).
- *Training on ESHS issues*: including dates, number of trainees, and topics.
- *Footprint management*: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.
- *External stakeholder engagement*: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
- *Details of any security risks*: details of risks the Project Company may be exposed to while performing its work—the threats may come from third parties external to the project.
- *Worker grievances*: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
- *External stakeholder grievances*: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender disaggregated.
- *Major changes to Contractors environmental and social practices*.
- *Deficiency and performance management*: actions taken in response to previous notices of deficiency or observations regarding ESHS performance and/or plans for actions to be taken should continue to be reported to UNOPS until it determines the issue is resolved satisfactorily.

## Reporting of ESMP

The UWS-PMU ESSO will report to UNOPS on monthly basis the implementation of the ESMP and UNOPS will report the ESMP implementation to the WB. There will be also additional reports based on the situation and updates. The UWS-PMU Supervision Consultant will monitor and report monthly and irregularly on the level of mitigation measures implementation and environmental issues. The contractors shall monitor, keep records and report on the following environmental and social issues: safety, Environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, external stakeholder engagement, details of any security risks, worker grievances, external stakeholder grievances, major changes to Contractors environmental and social practices, deficiency and performance management.

The following table provides indicative reporting plan.

### Reporting Plan:

What	How	Who	When
Compliance level to the ESMP including environmental and social issues, OHS, GM, etc.	Based on monitoring and inspections, log, the consultant reports, GM log	Environmental Specialist/ ESSO	Monthly from UWS-PMU/ADEN to UNOPS and quarterly from UNOPS to WB.
Compliance level to the ESMP and environmental and social issues: safety, environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, external stakeholder engagement, details of any security risks, worker grievances, external stakeholder grievances, major changes to Contractors environmental and social	Consultant based on monitoring, inspection, records, logs, contractor reports.	UWS-PMU/ADEN Supervision consultant	Monthly and based on cases

practices, deficiency and performance management.			
Environmental and social issues: safety, environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, external stakeholder engagement, details of any security risks, worker grievances, external stakeholder grievances, major changes to Contractors environmental and social practices, deficiency and performance management.	Contractor ESSO based on monitoring, inspection, records, and logs.	Contractor	Monthly and based on cases

## Annex 4 Consultation Questionnaires (Samples)

**USS Project**  
مركز الدراسات والبحوث

**بحث اجتماعي للمشروع الفرعي:**

اسم الباحث: أ. م. محمد  
تاريخ البحث والاستقصاء: 19 مارس 2022

معلومات عن منطقة المشروع: المنطقة المدينة: المنطقة المحافظة: المنطقة  
اسم المشروع الفرعي: المشروع الفرعي التسمية: المشروع الفرعي

اسم الشخص الذي تم مقابلته: م. م. محمد النوع: كثير التسمية: كثير  
الوظيفة: المعلم المؤسسة: المدرسة التسمية: كثير

رقم الهاتف / الموبايل: 011 23456789 الايميل: example@gmail.com

اجب ب نعم او لا

السؤال	نعم	لا	التفصيل
1 هل لديك مخاوف من تنفيذ المشروع حذرها ان وجدت		<input checked="" type="checkbox"/>	
2 هل يمكن يؤثر عليك او على معيشتك وعلى دخلك اذا الجاهه بنعم حدد بالتفصيل		<input checked="" type="checkbox"/>	
3 هل يمكن يؤثر المشروع على جيرانك او القرب او احد تعرفه حدد بالتفصيل		<input checked="" type="checkbox"/>	
4 هل يمكن بسبب المشروع تفقد ممتلكاتك ؟ حدد اذا كانت اجابته بنعم		<input checked="" type="checkbox"/>	
5 هل المشروع سيزيد من الضوضاء والازعاج القاء النفايات		<input checked="" type="checkbox"/>	
6 هل المشروع سيعمل على زيادة او اثاره الغير		<input checked="" type="checkbox"/>	
7 هل المشروع سيؤدي الى اضرار مرورية		<input checked="" type="checkbox"/>	
8 هل المشروع سيؤدي الى تلوث الهواء		<input checked="" type="checkbox"/>	
9 هل سيؤثر المشروع على الناس او المشاة او المدارس والطلاب او الحركة التجارية في المنطقة ؟ حدد بالتفصيل		<input checked="" type="checkbox"/>	
10 هل سيتم المشروع باستخدام ارضي خاصة او ممتلكات ؟		<input checked="" type="checkbox"/>	
11 هل سيؤثر المشروع على حركة النساء او الأطفال		<input checked="" type="checkbox"/>	
12 ما مدى فائدة تنفيذ المشروع ؟ على المجتمع والقرى ؟		<input checked="" type="checkbox"/>	مشروع ذو فائدة عالية للمجتمع والقرى
13 هل لديك أية مخاوف اخرى لم تذكرها		<input type="checkbox"/>	
14 ما هي مشاركتك / او فكرتك في تجنب الآثار المزعجة ان وجدت ؟		<input type="checkbox"/>	
15 مقترحات اضافية		<input type="checkbox"/>	



بعض الاماكن للمشروع الفرعي

اسم المانحة: (API) المليون  
 الترخيص الممنوح والاستخدام: 18 مايو 2022  
 اسم المشروع الفرعي: المنيرة  
 المنطقة: المنيرة  
 اسم الشخص الذي يملكه: نهاد سويد  
 الوظيفة العليا بالمنطقة: طالبة  
 رقم الترخيص / الوثيقة: ٧٧٨-٤٣٠٣  
 اسم الشارع: المنيرة  
 رقم المشروع: ٧٧٨-٤٣٠٣  
 اسم الشارع: المنيرة

رقم السؤال	نعم	لا	التفصيل
1		<input checked="" type="checkbox"/>	هل لديك معارف من تنفيذ المشروع حذرها ان وجدت
2		<input checked="" type="checkbox"/>	هل يمكن يؤثر عليك او على معشرك وعلى اهلك اذا الجاية بنعم حدد بالتفصيل
3		<input checked="" type="checkbox"/>	هل يمكن يؤثر المشروع على جيرانك او اقرب او احد تعرفه حدد بالتفصيل
4		<input checked="" type="checkbox"/>	هل يمكن بسبب المشروع تعدد ممتلكاتك ؟ حدد اذا كانت اجازتك بنعم
5		<input checked="" type="checkbox"/>	هل المشروع سيؤيد من العضوات والازواج لقاء التنفيذ
6		<input checked="" type="checkbox"/>	هل المشروع سيعمل على زيادة او الترافع العزل
7		<input checked="" type="checkbox"/>	هل المشروع سؤدي الى اضرار بيئية
8		<input checked="" type="checkbox"/>	هل المشروع سيؤدي الى تلوث الهواء
9		<input checked="" type="checkbox"/>	هل سيؤثر المشروع على الناس او المشاة او المدارس والطلاب او الحركة التجارية في المنطقة؟ حدد بالتفصيل
10		<input checked="" type="checkbox"/>	هل سيقوم المشروع باستخدام اراضي خاصة او ممتلكات؟
11		<input checked="" type="checkbox"/>	هل سؤثر المشروع على حركة النساء او الاطفال
12		<input checked="" type="checkbox"/>	ما مدى فائدة تنفيذ المشروع ؟ على المجتمع والفردي؟
13		<input checked="" type="checkbox"/>	هل لديك اية معارف اخرى لم تذكرها
14		<input checked="" type="checkbox"/>	ما هي مشاركتك / او فكرتك في تجنب الآثار المزعجة ان وجدت ؟
15		<input checked="" type="checkbox"/>	ملاحظات اضافية

اشارة لظروف عدم وعي اربابنا





بحث اجتماعي للمشروع الفرعي:

اسم الباحث (المعلم) المعلم احمد  
 تاريخ البحث والتقصاء 13 جانواري 2022

معلومات عن منطقة المشروع اسم المشروع القومي المشروع المنصور  
 المحافظة المنصورة التابعة المنصورة المدينة المنصورة الحي المنصور  
 اسم الشخص الذي تم مقابلة مستشار بلديات المنصورة النوع مقابلة  
 الوظيفة البلدية مستشار بلديات المنصورة المنصورة  
 رقم التكون / الهاتف 440502 المنصورة  
 اصحاب اسم 7

السؤال	نعم	لا	التعليق
1 هل لديك معلومات عن تنفيذ المشروع عند هذا الوقت	/		
2 هل يمكن يؤثر عليك أو على مجالك وعلى ذلك إذا العلمة يتم عند بالتصنيف	/		
3 هل يمكن يؤثر المشروع على حيواتك أو قرب أو بعد تعرفه عند بالتصنيف	/		
4 هل يمكن يصعب المشروع لك يمتلكك * عند لا كانت اجلك نعم	/		
5 هل المشروع سيؤيد من الموضوعات والأزجاج أثناء التنفيذ	/		
6 هل المشروع سيحصل على زيادة أو قارة الجاز	/		
7 هل المشروع سوي إلى احتياجات مصرية	/		
8 هل المشروع سوي إلى توقع الجواه	/		
9 هل سيؤثر المشروع على الناس أو المشاة أو المدارس والطلاب أو الحركة التجارية في المنطقة * عند بالتصنيف	/		
10 هل ميعوم المشروع باستعداد أو ارضي خاصة أو مستلكت*	/		
11 هل سواتر المشروع على حركة النساء أو الأطفال	/		
12 ما مدى قلقة تنفيذ المشروع * على المجتمع والفراد*	/		
13 هل أسيك أية مشايف اخرى لم تذكرها			
14 ما هي سياتك أو فكرتك في اجنب الآثار السريعة أو وحت*			
15 غير جات استاذية			

استرعي نوتما كبريا جياضه ومفرد الفواك



بحث اجتماعي للمشروع الفرعي:

اسم الناصح: م. م. م. م. م.  
 تاريخ البحث والاستقصاء: ٢٠٢٢  
 معلومات عن منطقة المشروع: اسم المشروع القومي: المشروع  
 المحافظة: السعيدية  
 اسم المشروع الفرعي: المشروع  
 اسم الشخص الذي تم مقابلة: م. م. م. م. م.  
 الوظيفة الحالية للشخص: م. م. م. م. م.  
 رقم التكون الموحد: ٧٧٧٧٧٧٧٧٧٧  
 الحساب رقم: ٧٧٧٧٧٧٧٧٧٧

السؤال	نعم	لا	التعليق
1. هل لديك معرفة من تعيد المشروع عندنا أو وجدت	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. هل يمكن إيضاح عليك أو على معاشك وعلى ذلك إذا التدهور يتم عند التكصيل	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. هل يمكن إيضاح المشروع على جيرانك أو القرب أو احد تعرفه عند التكصيل	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. هل يمكن سبب المشروع عند معاشك؟ عند ذلك كانت اجلك يتم	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. هل المشروع سيزيد من الصوصاء والآلات مع انشاء التجهيز	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. هل المشروع سيحصل على زيادة أو كثرة العمار	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. هل المشروع سؤدي الى احداثت مرورية	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. هل المشروع سؤدي الى تلوث الهواء	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. هل سؤاير المشروع على الناس أو المشاة أو المدارس والطلاب أو الحركة التجارية في المنطقة؟ عند التكصيل	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. هل مفهوم المشروع باستخدام ارض خاصة أو مستلكات؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. هل سؤاير المشروع على حركة النساء أو الأطفال	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. ما مدى فائدة تعيد المشروع؟ على المجتمع والقرد؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	المشروع جيد ويستحق ما
13. هل لديك اية معرفة اخرى أو شكرها			المشروع جيد ويستحق ما
14. ما هي مشاركتك أو فكرتك في تجنب الآثار السلبية إن وجدت؟			
15. ملاحظات اضافية			

Annex 5: The developed GVB action plan template

## Sexual Exploitation and Abuse (SEA) & Sexual Harassment (SH) Prevention and Response Action Plan - for Contractors

### Project Information

- Project Name:.....
- Subproject Name and Number:.....
- Project Location:.....
- Funding Source:
- Project Timeline:.....

### Contractor/Supplier Information:

- Contractor/Supplier Name:.....
- RFQ Reference:.....

### SEA & SH Prevention and Response Action plan objectives

#### General Objective:

The objective of the Action Plan is to establish procedures and actions for protecting project beneficiaries (local communities) from Sexual Exploitation and Abuse (SEA) as well as project beneficiaries and project workers from Sexual Harassment (SH) by providing adequate response mechanisms.

In brief, it is meant to protect beneficiaries/ personnel from potential/real SEA and SH risks caused by UNOPS contractors' actions during service provision.

*This plan includes the minimum standards UNOPS expects from the contractor/supplier according to UNOPS Terms and Conditions of Contract, under clause 4.27 Sexual Harassment, Exploitation and Abuse.*

*These minimum standards are based on UNOPS guidance [GS04](#) "Guidance on minimum requirements for works contractors on Protection from Sexual Exploitation, Abuse and Harassment (PSEAH)"*

#### Definitions with acronyms

- **Child:** any person below the age of eighteen years
- **Incapacitated:** A person who couldn't able to give a consent

- **Harm:** Negative impacts of visible and/or nonvisible acts towards individuals or groups
- **Gender roles:** social roles and behaviors that are generally considered appropriate or desirable for a person based on that person's biological or perceived sex
- **Gender-Based Violence (GBV):** A type of violence directed against a person because of that person's gender role. It can be visible or nonvisible and it results from power inequalities based on these roles
- **Sexual Exploitation (SE):** Any actual or attempted abuse of position of 1) vulnerability, 2) differential power or 3) trust, for sexual purposes
- **Sexual Abuse (SA):** Actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. This includes any sexual activity with children/ minors.
- **Sexual Harassment:** Any unwelcome sexual advance which includes 1) Request for sexual favor, 2) Verbal, physical conduct or gestures of a sexual nature, 3) Any other behavior of a sexual nature that has or might reasonably be expected or be perceived to cause offence, intimidation or humiliation to another
- **Survivor/Victim:** A person who is, or has been, exploited or abused.
- **Perpetrator:** A person who commits an act of SEA or other type of crime
- **Gender Mainstreaming:** The integration of a gender perspective (promoting equality between women and men, combating discrimination and avoiding potential and real gender-related risks) into the preparation, design, implementation, monitoring and evaluation of project scope of work
- **SEAH PRAP:** Sexual Exploitation, Abuse and Harassment Prevention and Response Action Plan. List the tasks relevant to preventing SEAH that you need to complete to deliver a project objective in terms of PSEA/H components

- **Code of Conduct (CoC):** Set of principles within an organization. It lays out the organizational principles, standards, and the moral and ethical expectations that employees and third parties are held to as they interact with the organization and the local population on project sites

## Principles for SEA

Every humanitarian worker, including contractor staff, shall adhere to the 6 core principles of SEA.

1. SEA constitutes acts of gross misconduct and are grounds for termination of employment. **No second chances!**
2. Sexual activity with children (under 18 yrs) is prohibited. **No sex with children.**
3. Exchange of money, employment, goods or services for sex is prohibited, including hiring prostitutes. **Don't hire/bribe anyone for sex.**
4. Any sexual relationship with beneficiaries that involves improper use of position is prohibited. **No sex with beneficiaries.**
5. Humanitarian workers are obliged to report any concerns regarding SEA by fellow workers. **Always report SEA.**
6. Humanitarian workers are obliged to create and maintain an environment which prevents SEA. **Discourage SEA around you.**

## Thematic Areas of the SEA & SH Prevention and Response Action Plan

Five main thematic areas are identified to build the Action Plan. These are aligned with UNOPS guidance GS04.

Checklist of sub-activities under the five thematic areas can be found in Annex 2, alongside a narrative description.

### **Thematic Area-1: Personnel PSEAH awareness**

Definition: Enhance the knowledge and awareness of personnel about SEA/SH and their role in prevention and mitigation of SEA/SH through awareness raising/training

- All contractor personnel involved in a UNOPS project must be familiar with the key PSEA concepts:
  - PSEAH definitions;
  - key PSEAH principles and why it is important;
  - consequences of SEAH;
  - contractors' and workers' responsibility on project sites;
  - tools to create an environment free from SEAH such as the Code of Conduct (CoC) and the periodic inspections;
  - obligation to report and reporting channels.

If necessary, awareness raising/training and material can be provided by UNOPS on these topics.

- Deliver a PSEAH induction training to all your project workers about the prohibition of SEA and SH, the content of the Code of Conduct as well as the major topics mentioned above

### **Thematic Area-2: Code of Conduct**

Definition: Ensure personnel accountability through the signing of a Code of Conduct that includes the prohibition of SEAH

- Upon receiving the PSEAH training, ensure all workers involved in a UNOPS project sign a Code of Conduct confirming their understanding of its content and their written commitment to the PSEAH principles.
- Create and keep records of the signed CoCs of all personnel and workers that can be inspected by UNOPS.

### **Thematic Area-3: Visibility for awareness raising and reporting**

Definition: Ensure personnel and local population is aware of PSEAH and able to report SEAH incidents in a safe and confidential manner

- Display the UNOPS PSEAH site posters in each project site adapted to the language and context of the area of implementation.
- Include in the posters the local reporting channel(s) for SEA/SH incidents (complaint boxes, hotline, email address, PSEAH focal point contact etc.)

#### **Thematic Area-4: Risk mapping, reporting & case referral**

Definition: Map the potential risks of SEA/SH and ensure reporting mechanisms are in place.

- Support UNOPS in the SEA/SH risk assessment for each project site you are working on (risk checklist to be provided by UNOPS)
- Report SEA/SH cases and allegations concerning contractors' personnel to UNOPS in a confidential and timely manner. Only give details of the case if the survivor gives her/his consent. If no consent is obtained, only report the case/allegation without details.  
Reporting can happen through multiple channels:
  - Submit an SEA/SH report to UNOPS [Speak Up](#) platform
  - Report the allegation to UNOPS Project Manager or PSEA Focal Point
- Ensure that reports of SEA/SH are in line with a survivor-centered approach (see Annex 1 for guiding principles of a survivor-centered approach)
- Refer any victims of project-related SEA/SH to existing services (legal, medical, psycho-social etc.), upon their consent

#### **Thematic Area-5: Investigation and corrective action**

Definition: Take responsibility for investigating any SEA/SH allegations concerning your own personnel (UNOPS will investigate any allegations related to misconduct of UNOPS personnel)

- Follow a [survivor-centered approach](#) when investigating SEA/SH allegations
- Take appropriate corrective action against offenders should SEA allegations be substantiated following investigation. Inform UNOPS with investigation process, results and corrective actions taken

## **Financing the SEA & SH Prevention and Response Action Plan**

Allocate the required budget to cover the associated expenses to implement this plan including but not limited to:

- Cost includes immediate referrals (transportation, medical costs, legal fees, professional investigators, psycho-social fee and any other related costs)
- Cost includes staff visibility, IEC and visibility materials printing
- Cost includes staff awareness and training costs
- Cost includes any additional required risk mitigation measures



## Annex 6: Guiding Principles of a Survivor-Centered Approach

### Relevant to Prevention from Sexual Exploitation and Abuse (SEA) & Sexual Harassment (SH) for Contractors

#### Guiding principles

Guiding principles provide ethical and practical guidelines for a field of work. The GBV Guiding Principles established by UNHCR In 1995 outline the ethical responsibilities service providers have when working with survivors. These four principles have been largely accepted by the humanitarian community as best practice for GBV case management: 1) respect the wishes, rights, and dignity of the survivor; 2) establish and ensure safety of the survivor; 3) maintain confidentiality; and 4) non-discrimination.

#### 1. Respect the Wishes, Rights and Dignity of the Survivor

This principle underscores the importance of interacting with the survivor using a validating, non-blaming and non-judgmental approach. This principle also reminds us that we must value the survivor. We express to survivors that we care about their experiences, their history and what happens to them now and in the future. We let the person know that she/he is valuable and matters in the world and to us. This is particularly important given the relational dynamics of the person's life and/or experiences with violence.

#### 2. Establish and Ensure Safety

Ensuring the physical and emotional safety of the survivor is safeguarding the survivor's physical and emotional well-being in the short and long-term. Safety must also be established within the relationship between us and the survivor such that the survivor feels she will not be physically or emotionally harmed by us or our actions.

#### 3. Maintain Confidentiality

This principle requires that everyone involved in the care and treatment of survivors protect information gathered about them and agree to only share information about their cases with their explicit permission. This means ensuring 1) the confidential collection of information during conversations; 2) that sharing information happens on a need to know basis only or in line with laws and policies; that permission is obtained from the survivor before information is shared; 3) when making a referral only the details relevant to the referral are shared with the service provider and a decision is reached with the survivor on what should be shared; and 4) case information is stored securely. Maintaining confidentiality also means that we never discuss case details with family and friends, or with colleagues whose knowledge of the abuse is deemed unnecessary.

#### 4. Non-Discrimination

Every adult or child, regardless of his/her sex, should be accorded equal care and support.

Victims/survivors of violence should receive equal and fair treatment regardless of their race, religion, nationality or sexual orientation. We fully recognize and intend to uphold this guiding principle in our work.

#### **Referrals to service provider**

Referrals for survivors of SEA/SH must be done with informed consent from the survivor (in case the survivor is an adult) and from the parent or legal guardian in case the survivor is a child or person with mental disability.

The referring party should make it clear to the person who gives informed consent that the referring party may need to share the information from the referral with professionals in other organizations (such as health or shelter service providers) to make sure the survivors get help.

The referring party should take a clear permission to share the information in the survivor's referral for this purpose (seeking help). The referring party must commit to ensuring the security, safety and confidentiality of the survivor's personal information in the Information Management system it uses.

## Annex 7: Thematic Areas of the SEA & SH Prevention and Response Action Plan

Thematic Area	Activity	Responsible	Target audience	Timeline
1. Personnel PSEAH awareness	<p>1.1 Deliver a PSEAH induction training to all project workers about the prohibition of SEA and SH, the content of the Code of Conduct and the reporting obligation</p> <p>The training should also include a mention of potential SEA/SH risks in and around the sites you are working on (based on the risk assessment conducted)</p>	Contractor company/contractor PSEA FP	Contractor staff and project workers	At the beginning of project implementation
2. Code of Conduct	<p>2.1 Prepare and launch the signature by all company personnel, including project site workers, of the Code of Conduct (CoC)</p> <p>Hint: (draft/proposed CoC can be provided by UNOPS)</p>	Contractor company	Company personnel and Project workers/ any affiliated personnel	Before the start of project implementation.
	<p>2.2 Create and keep records of the signed CoCs of all personnel and workers that can be inspected by UNOPS</p>	Contractor company	Contractor company	At project start
3. Visibility for awareness raising and reporting	<p>3.1 Appoint and train a company PSEA focal point with clear definition of the person's responsibilities.</p> <p>Hint: (UNOPS can support in defining focal point role and responsibilities and support with the training)</p>	Contractor company	Contractor company	Before the start of project implementation

	<p>3.2 Provide visibility and communication materials about PSEA/H (GBV posters in project sites).</p> <p>Include in the posters the local reporting channel(s) for SEA/SH incidents (complaint boxes, hotline, email address, PSEAH focal point contact etc.)</p>	Contractor company	Project sites and local population	Before the start of project implementation and to be monitored and present during the implementation.
	<p>3.3 Provide staff and workers with visibility clothing, to clearly identify them as working for your company</p>	Contractor company	Contractor workers	Before the start of project implementation and to be monitored during the implementation.
4. Risk mapping, reporting & case referral	<p>4.1 Support UNOPS in the SEA/SH risk assessment for each project site you are working on</p> <p>Hint: (risk checklist to be provided by UNOPS)</p> <p>Put in place appropriate mitigation measures according to the specific, project site SEA risks identified by the risk assessment</p>	Contractor company	Project sites, local population	Before the start of project Implementation.
	<p>4.2 Develop a simple company reporting mechanism for SEA/SH cases, that details how and to whom staff and workers can report cases, how and to whom the cases will be referred for investigation and how victims will be referred to services (legal, medical, psycho-social etc.)</p>	Contractor company/ contractor PSEA FP	Contractor workers and local Population (increase their access to reporting pathways)	Before the start of project Implementation.
	<p>4.3 Refer any victims of project-related SEA/SH to existing services (legal, medical, psycho-social etc.), upon their</p>	Contractor	Victims of SEA/SH	Immediately

	consent	company		
	<p>4.4. Report SEA/SH cases and allegations concerning contractors' personnel to UNOPS in a confidential and timely manner</p> <p>Ensure that reports of SEA/SH are in line with a survivor-centered approach (see Annex 1 for guiding principles of a survivor-centered approach)</p>	Contractor company	UNOPS	Within 24 hours
5. Investigation and corrective action	5.1 Investigate any SEA/SH allegations concerning your own personnel	Contractor company	Contractor company	As quickly as possible
	5.2 Take appropriate corrective action against offenders should SEA allegations be substantiated following investigation. Inform UNOPS about the investigation process, results and corrective actions taken.	Contractor company	Contractor company	Upon substantiation of allegations