



REPUBLIC OF KENYA

MINISTRY OF HEALTH

**ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK**

FOR

**KENYA COVID-19 EMERGENCY RESPONSE PROJECT
(P173820)**

**UNDER THE
COVID-19 STRATEGIC PREPAREDNESS AND RESPONSE
PROGRAM**

AUGUST, 2020

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ABBREVIATIONS AND ACRONYMS

ACHPR	African Charter on Human and Peoples' Rights
ACM	Asbestos Containing Materials
AIDS	Acquired Immune Deficiency Syndrome
BAT	Best Available Technologies
BEECS	Blood Establishment Equipment Computer Software
BMBL	Biosafety in Micro Biological and Biomedical Laboratories
BMWM	Bio Medical Waste Management
BSC	Biological Safety Cabinets
BSL	Biosafety Level
CDC	Centre for Disease Control and Prevention
CDE	County Director of Environment
CERC	Contingency Emergency Response Component
CoK	Constitution of Kenya
COVID-19	Coronavirus Disease 2019
CPHO	County Public Health Officer
CPR	Comprehensive Project Report
DOSHS	Directorate of Occupational Safety and Health Services
DOSH	Director Occupation Safety and Health
EHS	Environmental, Health and Safety
EHSGs	Environmental, Health and Safety Guidelines
EMCA	Environmental Management and coordination Act
EOC	Emergency Operating Centre
ERP	Emergency Response Plan
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESSs	Environmental and Social Standards
FPIC	Free Prior Informed Consent
GBV	Gender Based Violence
GIIP	Good International Industry Practice
GoK	Government of Kenya
GRM	Grievance Redress Mechanism
HAIs	Health-care Associated Infections
HCA	Health Care Administrator
HCF	Healthcare Facility
HCW	Healthcare Waste
HCWM	Healthcare Waste Management
HEPA	High Efficiency Particulate Air filter
HIV	Human Immunodeficiency Virus
HUTLCS	Historically underserved traditional local communities
HVAC	Heating, Ventilation and Air Conditioning

HWMS	Healthcare Waste Management System
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
ICU	Intensive Care Unit
ICWMP	Infection Control and Waste Management Plan
IDA	International Development Association
IEC	Information Education and Communication
IHR	International Health Regulations
ILOs	International Labor Organization
IPC	Infection and Prevention Control
KNBT	Kenya National Blood Transfusion
LMP	Labor Management Procedures
MoH	Ministry of Health
NACOSH	National Council for Occupational Safety and Health
NAPHS	National Action Plan for Health Security
NCA	National Construction Authority
NEMA	National Environment Management Authority
NPHI	National Public Health Institute
NPHL	National Public Health Laboratories
OAU	Organization of African Unity
OSH	Occupational Safety and Health
PCR	Polymerase Chain Reaction
PHEOC	Public Health Emergency Operations Center
PMT	Project Implementation Unit
POE	Point of Entry
POPs	Persistent Organic Pollutants
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
PWDs	People With Disabilities
RAP	Resettlement Action Plan
RBTCs	Regional Blood Transfusion Centers
RCCE	Risk Communication and Community Engagement
RoD	Records of Decision
RPF	Resettlement Policy Framework
SDB	Safe and Dignified Burials
SDGs	Sustainable Development Goals
SEA/SHEA	Sexual Exploitation and Abuse/Harassment
SEP	Stakeholder Engagement Plan
SERC	Standards and Enforcement Review Committee
SOP	Standard Operating Procedures
SPR	Summary Project Reports
STDs	Sexually Transmitted Diseases
TB	Tuberculosis
THS-UCP	Transforming Health Systems for Universal Care Project

TTIs	Transfusion Transmissible Infections
VCT	Voluntary Counselling and Testing
VMGs	Vulnerable and Marginalized Groups
WASH	Water and Sanitation Hygiene
WB	World Bank
WHO	World Health Organization
WWTP	Waste Water Treatment Plant

EXECUTIVE SUMMARY

This Environmental and Social Management Framework (ESMF) is developed to support the environment and social due diligence provisions for activities financed by the World Bank Group for the Kenya's COVID-19 Emergency Response Project. The Ministry of Health (MOH) is implementing the Project. The project will assist the Ministry of Health (MoH) to prevent, detect and respond to COVID-19 outbreak and strengthen national systems for public health emergency preparedness.

The objective of the ESMF is to assess and mitigate potential negative environment and social (E&S) risks and impacts of the project consistently with the Environmental and Social Standards (ESSs) of the World Bank Environmental and Social Framework (ESF). Specific objectives of the ESMF are to: (a) assess the potential E&S risks and impacts of the proposed project and propose their mitigation measures; (b) establish procedures for the E&S screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring E&S issues/ concerns related to the activities; (d) identify the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF. The ESMF also provides principles and specific process to ensure that disadvantaged, vulnerable individuals or groups have access to the project's benefits.

Project Description

The proposed project aims to assist Kenya in its efforts to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. The project has the following seven components:

Component 1. Medical Supplies and Equipment [US\$8,472,500 equivalent]: This component aims to improve the availability of supplies and equipment needed to respond to COVID-19 and other public health emergencies and strengthen the capacity of the MoH to provide timely medical diagnosis for COVID-19 patients.

Component 2. Response, Capacity Building and Training [US\$8,759,700 equivalent]: This component aims to strengthen response and build capacity of key stakeholders including health workers and communities.

Component 3. Quarantine, Isolation and Treatment Centers [US\$12,676,400 equivalent]: This component will strengthen the health systems capacity to effectively provide Infection Prevention and Control (IPC) and case management of COVID-19 cases.

Component 4. Medical Waste Management [US\$3,387,600 equivalent]: This component will ensure the safe management of waste generated by laboratory and medical activities.

Component 5. Community Discussions and Information Outreach [US\$4,960,100 equivalent]: Advocacy, communication and social mobilization is an integral component of strengthening surveillance and response to health emergencies. GoK has developed a risk communication and community

engagement strategy to keep the public informed on expected behaviors, how best to avoid infection and advise how to mitigate social and economic impacts due to the COVID-19.

Component 6: Availability of Safe Blood and Blood Products [US\$10,000,000]: This support will go towards strengthening the capacity of the Kenya National Blood Transfusion Service (KNBTS) to provide safe blood and blood products. Blood is core to all clinical aspects of health systems. As patients fall ill with COVID-19, many of whom will have co-morbidities, transfusions will be needed. Anemic mothers who deliver in this period will also continue to be at risk, etc. Further, at this time when people are less likely to go out, donations will fall which endangers the whole system.

Component 7. Project Implementation and monitoring [US\$1,743,700 equivalent]: Institutional and implementation arrangement are detailed under Section III. To support implementation, the project shall finance costs associated with the project coordination, activities for program implementation and monitoring and to strengthen management capacity.

Applicable World Bank Environmental and Social Standards

The Environmental and Social risk associated with the project is classified as “High”. Six of the ten Environmental and Social Standards (ESSs) of the WB’s Environmental and Social Framework (ESF) have been screened as relevant: ESS1: Assessment and Management of Environmental and Social Risks and Impacts, ESS2: Labor and Working Conditions, ESS3: Resource Efficiency and Pollution Prevention and Management, ESS4: Community Health and Safety, ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (HUTLCs) and ESS10: Stakeholder Engagement and Information Disclosure. The ESMF also takes into account the national requirements as well as the application of international protocols for infectious disease control and medical waste management.

WBG Environment, Health and Safety (EHS) Guidelines including those on “occupational health and safety”, “community health and safety”, “waste management”, “hazardous materials management”, and “construction and decommissioning” will apply to the extent relevant as well as appropriate current WHO Guidance note on COVID-19.

In addition to World Bank ESSs, the project shall comply with the Kenya’s Environmental and Social Regulatory Framework. Applicable Laws and regulations include; but not limit to, the Law on Environmental Protection and Natural Resource Management, Public Health, Labor Laws and relevant regulations, Waste Management, Air quality, Water Quality, Noise and Excessive Vibration Pollution, National Infection Prevention and Control Guidelines for Health Care Services among others.

Environmental and Social Risks and Impacts

The project will be national in coverage and scope. Since the exact participating facilities and their location are not yet known, this Environment and Social Management Framework (ESMF) has been prepared including a proposed ESMP (Sets out safeguard requirements for civil works (construction renovation/rehabilitation activities) in the project), and Infection Control and Waste Management Plan (ICWMP) (strengthen the function of existing healthcare facilities and laboratories infection control and waste management system) as annex. In addition, a Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP) have also been prepared for this project to ensure appropriate stakeholder

participation and adherence to labour laws, respectively. The potential risks have been grouped into different stages: Planning and Design, Construction (should any civil works be involved), Operational and Decommissioning phase to adequately evaluate the potential risks. The project has identified 14 high risk counties where construction and rehabilitation of the isolation facilities will be implemented as well as at the POEs among other additional sites for COVID-19 ERP. The specific locations where the sub-projects will be implemented have not yet been identified but priority will be given to health facilities of Level 5 and level 4 with high volume of patients.

Civil works are expected in this project under component 3, including construction, renovation or rehabilitation of isolation rooms in all the POE and in the 14 high risk counties in the level 5 and level 4 within the existing health facilities and structural changes in the referral hospitals to manage infectious diseases. This COVID-19 financing will support the rehabilitation of existing buildings within the state land only, no land acquisition or involuntary resettlement impacts are expected. As a result, there is no impact or risks critical natural habitats, protected areas or cultural sites. However, the COVID-19 Preparedness and Response operations of laboratories (equipment, reagents /chemicals) as well as quarantine and isolation centers may have considerable environmental and social impacts, such as those related to medical and general waste disposal, and the potential for transmission of the COVID-19 virus if infection prevention protocols are not followed.

It is worth noting, the construction/ rehabilitation/upgrade/renovation of health care facilities may generate limited adverse impacts such as dust, noise, vibration, construction waste, waste water, traffic obstruction, occupational health and safety risk, construction workers hygiene and sanitation to the environment and surrounding residents as well as community health and safety risks. These impacts are assessed to be site-specific, temporary and can be mitigated with best practices, good design and construction practices using the environmental and social management plans prepared as part of this ESMF,

Medical and chemical waste (including water, reagents, infected materials, etc.) from the labs, quarantine, isolation and screening posts to be supported (drugs, supplies and medical equipment) can have a significant impact on the environment and human health, in particular the potential for transmission of COVID-19. Each beneficiary medical facility/lab, will need to follow the requirements of the ESMF and the mitigation measures outlined, in-line with WHO COVID-19 interim guidance notes, National Infection Prevention and Control Guidelines for Health Care Services, and other best international practices, and prepare and follow the site specific Infection Control Waste Management Plan (ICWMP) to prevent or minimize such adverse impacts.

Most activities supported by the project will be conducted by health- laboratory workers, i.e. civil servants employed by the Government of Kenya, including non-medical hospital staff (such as cleaners and drivers), and professional consultants and contractors. The key risk for these workers is contamination with COVID-19 (or other contagious illnesses). Labor Management Procedures (LMP) in the ESMF cover these risks for entry into health care facilities; procedures for protection of workers in relation to infection control precautions; provision of immediate and ongoing training on the procedures to all categories of workers; training on use of Personal Protection Equipment (PPE), and overall ensuring adequate Occupational Safety and Health (OSH) protection is in place. Also, the project will regularly integrate the latest guidance by WHO as it develops over time addressing COVID-19.

The operation of quarantine and isolation centers needs to be implemented in a way that staff, patients, and the wider public follow and are treated in line with international best practice as outlined in WHO guidance for COVID-19 response and National Infection Prevention and Control Guidelines for Health Care Services. The Stakeholder Engagement Plan (SEP) will also ensure widespread engagement with communities in order to disseminate information related to community health and safety, particularly around social distancing, high risk demographics, self-quarantine, and mandatory quarantine. The project will strive to ensure communication materials are created in a way that can reach all groups of people, in particular the most vulnerable, and that are in a format and manner that is applicable to them.

Other risks from the project include Sexual Exploitation and Abuse (SEA), Gender-Based Violence (GBV) and Violence Against Children (VAC), which are addressed in the ESMF mitigation measures, the LMP and Codes of Conduct (CoC). Gender considerations are also part of all project components, in particular since the majority of health workers in the country are women.

Mitigation measures for these and other risks identified have been devised in detail in this ESMF.

Environmental and Social Screening

The purpose of this screening process is to determine (i) whether the activities are eligible to be financed or part of the exclusion list, (ii) determine whether activities are likely to have potential negative environmental and social risks and impacts; and (iii) identify appropriate mitigation measures. For activities with adverse risks or impacts, the mitigation measures are then incorporated into the activity implementation, e.g. through appropriate environmental and social management plans the implementation of which is monitored and reported.

Monitoring, Supervision and Reporting

All the activities to be financed under the Kenya COVID-19 Emergency Response Project will follow the Environment and Social Framework (ESF), environment and social standards and the provisions described and agreed in the ESMF, ESCP, SEP, LMP and other environment and social due diligence reports prepared under the project to ensure proper management of environment, social, safety and occupational health requirements, additionally sub-project ESMPs and ICWMPs shall be developed. Environmental monitoring aims at checking the effectiveness and relevance of the implementation of the proposed mitigation measures. Any accident or incident shall be reported to the MoH and the World Bank within 48 hours of occurrence.

Implementation Arrangements and Responsibilities

MoH will be the main implementing agency for the project and will lead the execution of project activities. Other implementing entities will include; County Governments, Kenya National Blood Transfusion Services (KNBTS), health facilities, including but not limited to Kenyatta National Hospital, Moi Teaching and Referral Hospital, Kenyatta University Teaching, Referral and Research Hospital, Kenya Medical Research Institute and other relevant ministries where needed. The following institutional arrangement will be used in the implementation of the project:

The National Emergency Response Committee (NERC) on COVID-19, chaired by the Cabinet Secretary for Health will provide stewardship and oversight of the project. The NERC was established by the President through an executive order to address various aspects related to COVID-19 preparedness and response.

The National COVID-19 Task force will provide technical guidance throughout the implementation process. The task force draws membership drawn from the MoH, other relevant Government agencies, development partners, Non-governmental organizations and civil society organizations. The mandate of the task force is to review the evolving threat from the COVID-19 outbreak and regularly offer technical advice to the MoH and other line ministries on appropriate measures.

Project Management Team (PMT) established specifically for this project. Project management will be the responsibility of this PMT. The PMT will be located in the MoH, and will report directly to the Principal Secretary, MoH. It will be responsible for coordinating the day to day implementation of activities to ensure timely implementation of the Project at National and County levels. It will liaise closely with the Transforming Health Systems (THS), project management team.

Capacity Building

Given that Kenya has limited experience in managing highly infectious diseases such as COVID-19, and the associated risks, the project will provide considerable funding, training and capacity building to support these critical initiatives and build upon international expertise to achieve international best practice in line with WHO guidelines. Some of the training areas include: on the new World Bank Environment and Social Framework (ESF), ESMF, sub-project specific ESMP for component 3 and 4, ICWMP, infection prevention and control measures, Community Health and Safety, Emergency Preparedness and Response, among others.

Consultation and Stakeholder Engagement

The project has prepared a Stakeholder Engagement Plan (SEP), which defines a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. It also outlines a communication strategy with the project stakeholders, and offers mechanisms for them to raise concerns, provide feedback, or make complaints about the project. The SEP is a living document with objectives to:

- Identify all project stakeholders including their priorities and concerns, and ensure the project has ways to incorporate these;
- Identify strategies for information sharing and communication to stakeholders in ways that are meaningful and accessible;
- Specify procedures and methodologies for stakeholder consultations, documentation of the proceedings and strategies for feedback;
- Establish an accessible, culturally appropriate and responsive grievance mechanism, and
- Develop a strategy for stakeholder participation in the monitoring of project impacts.

Grievance Redress Mechanism

A grievance redress mechanism (GRM) is part of the project ESMF and SEP and will be established to resolve complaints and grievances in a timely, effective and efficient manner. Project related grievances can be submitted for detrimental impact on the community, the environment, or on their quality of life. Stakeholders may also submit compliments and suggestions. The GRM provides complaint or resolving measures for any dispute, appropriate redress actions and avoids the need to resort to judicial proceedings. Grievances will be handled at each County /Regional referral hospitals and at the national level by a Grievance Redress Committee to be established by MOH, including via dedicated hotline to be established.

Budget

Adequate budget should be provided for the implementation of ESMF to include training, development of E&S due diligence measures and others to be determined by E&S tools. Funds are needed to hire consultant(s) to prepare Environmental and Social Impact Assessments (ESIAs), Environmental audits, site specific ESMPs and all other associated E&S due diligence reports. Costs for undertaking travel to conduct monitoring and trainings should be allocated. It is worth noting that there is a significant overlap in project activities to achieve its objectives, and the risk management measures prescribed in the ESMF (Training areas for the implementation of ESMF is an illustrative example with estimates of 400,000 USD including budget on environmental and social assessments and audits. A good part of the project budget will be used for very similar activities as those outlined in the ESMF, e.g. for training, healthcare facilities health and safety requirements, and information dissemination under the SEP among others.

1. Background

Government of Kenya (GoK) has obtained financing from the World Bank for the Kenya COVID-19 Emergency Response Project. The project will assist the Ministry of Health (MoH) to prevent, detect and respond to COVID-19 outbreak and strengthen national systems for public health emergency preparedness. The COVID-19 cases have been on upward trend since March 13, 2020 when the first case was announced. The infection is currently in 45 out of the 47 counties in the country. Nairobi is one of the current epicenter of the infections, it has been reported in all parts including the informal settlements. Other emerging epicenters include Mombasa, Mandera and Wajir; the infection keep spreading to new areas thus need for this ESMF.

The economic impacts of COVID-19 are expected to be massive. COVID-19 threatens livelihoods, food security, nutrition, and schooling, particularly in low-and-middle income countries like Kenya, where a majority of the population work in the informal sector. It is estimated that economic growth in 2020 could decrease by as much as 2.9 percent (from a baseline of 6.0 percent in the January 2020 GEP and from 5.7 percent in the Spring MPO), thereby plunging economic growth to about 3.1 percent in 2020. In the event of a downside scenario, the contraction could be higher, with a growth in 2020 of about 2.2 percent.

Kenya is encountering this crisis with important sources of economic resilience, but also significant fiscal constraints. Real Gross Domestic Product (GDP) growth has been robust, averaging 5.7 percent over the last five years, and the macroeconomic environment has been stable (with low inflation and a narrowing current account deficit). The financial sector is sound, with banks being adequately capitalized and liquid at the system level. Interest rate caps have been repealed, easing access to credit and creating space to loosen monetary policy. Nonetheless, the high government debt burden and wide budget deficit leave little fiscal space to deal with emergencies such as this pandemic. In addition, private sector investment has been a weak spot in the economy, and now faces additional headwinds.

Despite the GoK's commitment to strengthen pandemic preparedness and response, capacity is limited. A 2017 Joint External Evaluation (JEE) of the core capacities in the International Health Regulations (IHR) assessed the strengths and weaknesses in Kenya; it also identified priority interventions to improve the preparedness of the health system as a whole. These included inter alia: legislation or policies to enable IHR implementation and coordination structures; strengthening quality management system for point of care testing; improving capacity and sustainability of the Public Health Emergency Operations Centre (PHEOC); and developing a multi-sectoral pandemic preparedness plan. Following these recommendations, the Ministry of Health (MoH) developed the National Action Plan for Health Security (NAPHS), which aims to strengthen the IHR core capacities, by identifying priorities, adopting strategies and implementing high impact interventions to improve the country's health security on all 19 core capacities¹. The NAPHS also emphasizes the strong need to establish and operationalize a National Public Health Institute (NPHI), to reduce fragmentation in public health activities, and consolidate public health functions bringing together data and expertise across sectors.

1.1 Project Context

The project will be implemented throughout Kenya and will contribute to improved COVID-19 ERP: to prevent, detect and respond to COVID-19 outbreak and strengthen national systems for public health emergency preparedness. Although 14 counties have been targeted for implementation of project activities, specific locations where sub-components will be implemented have not yet been identified. Kenya has considerable geographical diversity and as a result, is endowed with great diversity of plant,

¹ WHO, International Health Regulations (2005) IHR Core Capacity Monitoring Framework: Questionnaire For Monitoring Progress in the Implementation of IHR Core Capacities in States Parties, WHO/WHE/CPI/2017.41: <https://apps.who.int/iris/bitstream/handle/10665/255756/WHO-WHE-CPI-2017.41-eng.pdf?sequence=1>

animal and microbial genetic resources. The civil works supported under this project (Component 3) include construction/renovations and equipping of Isolation rooms in all PoEs, isolation rooms in all 14 high risk counties, strengthening capacity of Kenyatta National Hospital Infectious Disease Unit, Mbagathi, Kenyatta University Teaching and Referral Hospital and Moi Teaching and Referral Hospital to manage infectious diseases – including structural changes to improve negative pressure airflow, floor and air quality. The works as much as possible will take place in existing facilities. The project is not expected to endanger natural habitats or cultural sites. COVID-19 Preparedness and Response activities such as the operation of laboratories (equipment, reagents /chemicals) as well as quarantine and isolation centres can have considerable environmental and social impacts. Such activities will be implemented in urban as well as remote areas (including border areas and areas of potential communal conflicts); above all in the latter quality control will be essential. Some of the target project areas are located in proximity to fragile states and as a major land and air transportation hub greatly exacerbate the vulnerabilities to epidemics. Additionally, Kenya currently shelters about 490,000 registered refugees mainly from South Sudan and Somalia. The project will also support the Kenya Blood Transfusion Service in six regional blood transfusion centres in Nairobi, Embu, Nakuru, Mombasa, Eldoret, Kisumu and 25 other satellite centres by ensuring the availability of safe blood and blood products.

1.2 Financing

This project is part of the emergency response to the Republic of Kenya under the COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA) with an overall Program financing envelope of International Development Association (IDA) US\$1.3 billion and of International Bank for Reconstruction and Development (IBRD) US\$2.7 billion. The Government of Denmark is co-financing the Project with US\$3.2 million. Financing allocated to the Kenya part of the program is US\$50 million.

The proposed financing for the project will be provided through the WBG COVID-19 Fast Track Facility, as part of a Global COVID-19 MPA Program, designed to assist countries to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. The amount allocated to Kenya under the Fast Track Facility is based on criteria for each country taking into consideration key factors such as population size, GDP per capita, and other selected criteria.

The project complements the World Bank's ongoing investments: (i) technical assistance to pandemic preparedness; and (ii) the Transforming Health Systems for Universal Care Project (THS-UCP – P152394) (Report No. PAD1694) which includes a Contingency Emergency Response Component (CERC) (US\$10 million) that was triggered to co-finance the National COVID-19 Contingency Plan. The project is also aligned to the Kenya Health Sector Strategic and Investment Plan III, which includes disease surveillance and information as a key investment priority.

1.3 Rationale and purpose of using an Environmental and Social Management Framework

- Rationale of a framework is that specific locations and detailed information about the sub-projects will only be known during implementation. Most components will be national, however quarantine, isolation and treatment centers will focus on 14 high risk counties based on ports of entry and high numbers of internationals. These are: Busia, Garissa, Kajiado, Kiambu, Kilifi, Kisumu, Machakos, Migori, Mombasa, Nairobi, Nakuru, Turkana, Uasin Gishu and Wajir. However, the actual focus will also be determined by the spread of the virus.
- Purpose of a framework is to guide the Project Management Team (PMT) and the sub-project proponents on the environmental and social (E&S) screening and subsequent sub-project assessment during project implementation, including development of sub-project specific plans that have to be developed in accordance with the Bank Environment and Social Framework (ESF).

- Scope of a framework is to enhance the development of relevant procedures in the identification of the specific component or sub-projects that will support the strengthening of national health care systems. This ESMF will allow the project to assess to the extent possible and based on existing information, the environmental and social risks and impacts and identify mitigation measures, as part of sub-project-specific instruments (plans), in accordance with the ESF.

2 Project Description

The proposed project aims to assist Kenya in its efforts to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. The project has the following seven components:

2.1 Component 1. Medical Supplies and Equipment [US\$8,472,500 equivalent]:

This component aims to improve the availability of supplies and equipment needed to respond to COVID-19 and other public health emergencies and strengthen the capacity of the MoH to provide timely medical diagnosis for COVID-19 patients. Support under this component will include but not limited to the following areas:

- a) Strengthening capacity of seven laboratories (including two zoonotic laboratories) to manage large scale testing for COVID-19 cases and other infectious diseases. Support will include procurement of specialized equipment (i.e. Polymerase Chain Reaction (PCR) machines, sequencer etc.) to allow screening of multiple pathogens and purchase of test kits;
- b) Providing sample collection and packaging supplies, reagents and transport media, including shipment of samples to the National Public Health Laboratories (NPHL) and other referral laboratories;
- c) Procurement of Personal Protective Equipment (PPE) to the healthcare workers , pharmaceuticals and non-pharmaceutical commodities and supplies required for case management and infection prevention control; and
- d) Strengthening clinical care capacity in selected hospitals to provide critical care for patients with severe illnesses. According to the WHO, while most patients with COVID-19 are developing a mild or uncomplicated illness, approximately 14 percent develop severe disease requiring hospitalization and oxygen support, and 5 percent require admission to an Intensive Care Unit (ICU). This support will, therefore, increase the capacity of the MoH and County Governments to manage severe cases through the procurement of ICU sets and dialysis beds

2.2 Component 2. Response, Capacity Building and Training [US\$8,759,700 equivalent]:

This component aims to strengthen response and build capacity of key stakeholders including health works and communities. Support under this component will include but not limited to the following areas:

- a) Coordination of activities at national and county level, including support towards the National COVID-19 Steering Committee and the National COVID-19 Task force;
- b) Training health workers including surge health workers/community health workers and laboratory personnel at all levels of the health system on relevant guidelines and protocols including aspects on environment health and safety management
- c) Adaptation and roll out of the 3rd Edition of Integrated Disease Surveillance and Response technical guidelines;
- d) Strengthening surveillance and screening at all PoEs and at the community level, including development and adaptation of an electronic community-based reporting system, training of community health workers and equipping them with the right tools to conduct surveillance, and equipping all PoE with the necessities to function effectively;
- e) Strengthening operational capacity of the PHEOC, Rapid Response and Contact Tracing Teams;
- f) Cross hospital expert teleconferencing facilities in selected hospitals to enable clinicians share their knowledge and experiences in management of diseases;

- g) Establishment and operationalization of the NPHI; and
- h) Increasing the number of health workers required to meet the additional demands for surveillance, rapid response and case management.

2.3 Component 3. Quarantine, Isolation and Treatment Centres [US\$12,676,400 equivalent]

This component will strengthen the health systems capacity to effectively provide Infection Prevention and Control (IPC) and case management of COVID-19 cases. Key areas of support include construction/renovations and equipping the following facilities:

- a) Facilities for isolation rooms in all PoEs (Ports of Entry);
- b) Isolation room facilities in all 14 high risk counties (Figure 2-1), Level Five hospitals and high-volume Level Four hospitals; and
- c) Strengthening capacity of the Kenyatta National Hospital Infectious Disease Unit Mbagathi, Kenyatta University Teaching and Referral Hospital and Moi Teaching and Referral Hospital to manage infectious diseases – including structural changes to improve negative pressure airflow, floor and air quality among others.

There is additional arrangement with the private hotel owners and public institution management in converting these facilities to be quarantine and or isolation centres, or the use of stadiums for temporary hospital areas.

2.4 Component 4. Medical Waste Management [US\$3,387,600 equivalent]

This component will ensure the safe management of medical waste generated by laboratory and medical activities. The selection of the waste treatment facilities design will be based on available supporting infrastructure and resources such as reliable resources of power, fuel, total amount of medical waste generated by the HCF, and would consider the need for temporal storage due to the peak waste generated due to COVID-19 in comparison to average monthly medical waste generated. It will include:

- a) Procurement of specialized incinerators for three national-level referral hospitals and other referral laboratories, where these are not available. No refurbishment of existing waste treatment facilities is planned, and
- b) Construction of incinerator areas, ash pits, acquisition of licenses and training on incinerator use, and medical waste packaging such as bags and safety boxes (these will mainly be at the identified project beneficiary referral laboratories, healthcare facilities, Isolation and Quarantine Areas),

2.5 Component 5. Community Discussions and Information Outreach [US\$4,960,100 equivalent]

Advocacy, communication and social mobilization is an integral component of strengthening surveillance and response to health emergencies. GoK has developed a risk communication and community engagement strategy to keep the public informed on expected behaviors, how best to avoid infection and advise how to mitigate social and economic impacts due to the COVID-19. This component will ensure there is a two- way communication between the Government and the population. Regular communication is essential in building trust and increasing community support and engagement on the response to enable compliance with public health recommendations. Supported activities include:

- a) Rapid community behavior assessment to gather information about different group's knowledge, attitudes, beliefs, and challenges related COVID-19 response;
- b) Continuous behavior assessment and community sensitization through mobile feedback (text messages, social media platforms), public health address systems and dedicated radio call-in shows both mainstream and indigenous languages to ensure preventative community and individual health and hygiene practices in line with national public health containment recommendations;
- c) Design, production and distribution of Information Education and Communication (IEC) materials (posters, brochures, roll-up banners and fact sheets);
- d) Publishing electronic IEC materials through all media outlets, including translation of messages into various indigenous languages; and
- e) Communication in support of grievance redress mechanism.

2.6 Component 6: Availability of Safe Blood and Blood Products [US\$10,000,000]

This support will go towards strengthening the capacity of the Kenya National Blood Transfusion Service (KNBTS) to provide safe blood and blood products. Blood is core to all clinical aspects of health systems. As patients fall ill with COVID-19, many of whom will have co-morbidities, transfusions will be needed. Anemic mothers who deliver in this period will also continue to be at risk, etc. Further, at this time when people are less likely to go out, donations will fall which endangers the whole system. This component will include:

- a) Enhancing blood collection and supply services through strengthening the coordination of national, Regional Blood Transfusion Centers (RBTCs) and satellite centers; procurement of consumables and supplies for blood collection; procurement of supplementary auxiliary equipment for the blood collection centers such as blood mixers, blood bank refrigerators and blood donor coaches; and strengthening systems for blood mobilization, collection and retention;
- b) Automating blood transfusion service systems to enhance efficiency and traceability of blood and blood products between collection sites, RBTCs, and transfusing health facilities. This will involve assessing the existing Blood Establishment Equipment Computer Software (BECS) and the extent to which it meets the country's needs. Based on the outcome of the assessment, support will include expanding the BECs Information and Communications Technology (ICT) system to satellite centers and facilities, or purchase and installation of a new software, procurement of ICT equipment and capacity building staff;
- c) Enhancing screening for Transfusion Transmissible Infections (TTIs). In order to ensure that blood for transfusion is safe and free from TTIs, the project will expand the KNBTS testing capacity. This will include procurement of auxiliary and multiplex laboratory equipment, and purchase of reagents for screening of TTI and pathogen inactivation;
- d) Enhancing efficiency and quality of blood and blood products. International blood transfusion standards recommend transfusion of blood products instead of whole blood apart from exceptional situations such exchange transfusion in new-born or trauma. The KNBTs is currently processing blood to blood components using a manual system, potentially compromising quality blood components and reduced efficiency of the blood processes. Support will include, full automation of blood component processing systems, maintaining cold rooms for blood storage, procurement and maintenance of generators to ensure limited loss of the blood and blood products, and establishing a preventive maintenance plan for all the laboratory equipment in collaboration with the NPHL equipment maintenance Centre of Excellence; and

e) Strengthening quality assurance systems in line with international standards and best practices on blood safety. The KNBTs will pursue blood bank accreditation from the African Society for Blood Transfusion standards and further accredit two remaining testing centers to ISO 15189 standards. Support will also include training and mentorship of technical staff, testing centers enrolment into proficiency testing schemes and the contracting of integrated courier services for blood transfusion.

2.7 Component 7. Project Implementation and Monitoring [US\$1,743,700 equivalent]

Institutional and implementation arrangement are detailed under Section III. To support implementation, the project shall finance costs associated with the project coordination, activities for program implementation and monitoring and to strengthen management capacity. Key areas of support include:

- a) Operational costs and logistical services for day-to-day management of the project;
- b) M&E activities, including process evaluation to monitor implementation progress and address implementation challenge;
- c) Environmental and social safeguards related activities, including establishment of a call center to handle complaints and feedback to the public, linked to the PHEOC;
- d) Stakeholder engagement; and
- e) Contracting of staff on short term basis for any required specialized skills like engineering and public works.

2.8 Civil Works Supported under the Project

The civil works supported under this project (Component 3) shall include:

- Construction/renovations and equipping of isolation rooms in all PoEs, and in all 14 high risk counties in level 5 hospitals and all level 4 hospitals with high volume of patients;
- Renovations of existing spaces to quarantine facilities within PoE ((JKIA/MIA/KIA/EIA/Wilson, Wajir Busia, Malaba and Namanga);
- Strengthening capacity of Kenyatta National Hospital Infectious Disease Unit, Mbagathi Hospital, Kenyatta University Teaching and Referral Hospital and Moi Teaching and Referral Hospital to manage infectious diseases including structural changes to improve negative pressure airflow, floor and air quality, water supply provision to the required standards, renovation of the staff common and rest rooms among other renovations;
- Renovations of regional ambulance command centers in 14 priority counties; and
- Construction and renovations of the National Public Health Institute (facility that will bring together all the key pillars for preparedness and response to help on improving coordination).
- Construction and/or installation of the waste treatment facilities such as; incinerators (incinerator housing and ash pits)

2.9 Waste Management Facilities

Medical waste management is a critical area in this project, since the waste generated in the management of COVID-19 cases is highly infectious. This project shall support medical waste management under component 4 to ensure safe disposal of healthcare waste generated by project beneficiary laboratories, isolation and quarantine areas and other medical activities. Towards achieving this, the project will support procurement of specialized waste treatment facilities/equipment to selected referral hospitals and laboratories, where these facilities are not currently available and other selected HCFs.

The COVID 19 National task force is assigned the role of selection of the HCF's to benefit with waste treatment units related to case management (concentrating on high volumes of healthcare waste generated, facilities without waste treatment systems that comply with waste management regulations) among other issues. Due diligence of the existing waste treatment facilities (on-site and off-site treatment) used under the project will be carried out by the Environment and the social specialist.

The project will cover cost of activities which include construction and/or installation of the waste treatment facilities, in the case of incinerators (incinerator sheds, ash pits), and acquisition of license to operate the waste treatment facility as well as capacity building and training to the waste treatment facility operators. An Environment and Social Impact Assessment for new construction and /or installation of waste treatment facilities shall be undertaken and license to operate the waste treatment unit shall be obtained from NEMA. In addition, during operational phase an environmental and social audit of the waste treatment facilities will be carried out in line with EMCA Waste Management Regulations, 2006. The project will also procure medical waste packaging supplies such as bins, bin liners, safety boxes and Personal Protective Equipment (PPE) for waste handlers.

During the operational phase, the beneficiary counties/healthcare facilities will be responsible for the costs associated with operation and maintenance of the waste treatment units.

2.10 Medical Supplies and Equipment

The project will finance medical supplies and equipment (component 1) to help improve on response to COVID-19 and other public health emergencies. This includes:

- i) Strengthening capacity of seven laboratories (including two zoonotic laboratories) to manage large scale testing for COVID-19 cases and other infectious diseases. Support will include procurement of specialized equipment (i.e. Polymerase Chain Reaction (PCR) machines, sequencer etc.) to allow screening of multiple pathogens and purchase of test kits.
- ii) Providing sample collection and packaging supplies, reagents and transport media, including shipment of samples to the National Public Health Laboratories (NPHL) and other referral laboratories.
- iii) Procurement of Personal Protective Equipment (PPE), pharmaceuticals and non-pharmaceutical commodities and supplies required for case management and infection prevention control; and
- iv) Strengthening clinical care capacity in selected hospitals to provide critical care for patients with severe illnesses through the procurement of ICU sets and dialysis beds.

2.11 Health Education on COVID-19

The project will support the production of health education materials that will be disseminated through different channels. The key activities to be implemented under Component 5 are:

- i) Rapid community behavior assessment to gather information about different group's knowledge, attitudes, beliefs, and challenges related COVID-19 response;
- ii) Behavior assessment and community sensitization through mobile feedback (text messages, social media platforms), public health address systems and dedicated radio call-in shows both mainstream and indigenous languages to ensure promotion of preventative community and

- individual health and hygiene practices in line with national public health containment recommendations;
- iii) Design, production and distribution of Information Education and Communication (IEC) materials (posters, brochures, roll-up banners and fact sheets) that are accessible to all groups including HULTCs/VMGs;
- iv) Publishing electronic IEC materials through all media outlets, including translation of messages into various local languages; and
- v) Communication in support of grievance redress mechanism that will be established for this project.

The project will involve the movement of consumables and supplies for specimen, samples and blood collection and delivery to the nearby laboratory and blood banks and hospitals.

The government will recruit additional health personnel to augment the current capacity including ambulance teams. In addition, the government intends to deploy the National Youth Service to support with contact tracing for positive patients. There will also be a need to recruit community volunteers for data collection and information dissemination. The Government intends to engage the National Youth Service to enhance community service provision and outreach.

All construction and renovation activities in all the 14 counties will be undertaken within existing health facilities, thus ESS5 in reference to permanent resettlement or land acquisition is not considered relevant. Temporary closures, reduced access, or disruption shall be conducted in consultative manner with the Project Affected Persons (PAPs), ensuring no forced eviction takes place.

This COVID-19 ESMF is prepared to assist Government of Kenya in developing environmental and social (E&S) instruments in response to COVID-19 situations following national regulations and the World Bank's Environmental and Social Framework. This ESMF includes a generic Environmental and Social Management Plan (ESMP), Infection Control and Waste Management Plan (ICWMP), Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP). The former aims to provide an overarching action plan for the management of Environmental, Social, Safety and Health (ESSH) issues associated with the construction and operation of healthcare facilities in response to COVID-19. The latter focuses on proper infection control and healthcare waste management practices during operation of healthcare facilities, quarantine and isolation areas. The ICWMP is considered as part of the ESMF.

The Environmental and Social Commitment Plan (ESCP) prepared for the project has clearly outlined the activities considered as ineligible for financing under the project. These include:

- Activities that may cause long-term, permanent and/or irreversible adverse impacts (e.g. loss of major natural habitat);
- Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19;
- Activities that may have significant adverse social impacts and may give rise to significant social conflict;
- Activities which would require Free Prior Informed Consent (FPIC);
- Activities that may affect lands or rights of VMGs or other vulnerable minorities; and
- Activities that may involve permanent resettlement or land acquisition or adverse impacts on cultural heritage.

3 Policy, Legal and Regulatory Framework

In this section the policies, legal and institutional frameworks for environmental management in Kenya and the relevant WB ESF Policy and other relevant Good International Industry Practice and Conventions are discussed. This section has been discussed in subsections: Policy Framework (Table 3-1), Legal Framework (Table 3-2), Institutional Framework (Table 3.3), Social Statutes (Table 3.4) and WB ESF (Table 3-5) and other relevant Good International Industry Practice and Conventions / Agreements and Protocols.

3.1 Policy Framework

Table 3- 1: Policy Framework

#	Policy	Provision	Relevance
1.	National Environmental Policy, 2013	The policy promote the use of Environment assessment tools such as ESIA/EA necessary to ensure environmental quality and resource productivity on long term basis. Further it calls for management in use of hazardous and toxic chemicals as well as radiation regulations.	The Policy requires all sub-projects which are likely to have significant environmental and social impacts to undergo environmental and social assessment in order to establish sound environmental management practices.
2.	The National Occupational Safety and Health Policy, 2012	The Policy seeks to reduce the number of work-related accidents and diseases, and equitably provide compensation and rehabilitation to those injured at work or who contract occupational diseases.	The policy requires the provision of appropriate and adequate PPE, avail First Aid services on site as well as development of Safety and Health Emergency Contact at the site and workplace registration.
3.	Kenya Health Policy 2012 – 2030	The Policy aim is to achieve this goal through supporting provision of equitable, affordable and quality health and related services at the highest attainable standards and minimize exposure to health risk factors to all Kenyans.	The Policy calls for the provision and distribution of healthcare services to all people that is commensurate with that of a middle income country without segregation.
4.	National Plan on Healthcare Waste Management 2016-2021	Provides a viable technical and management options as well as a roadmap for the domestication of the National HCWM Strategic Plan 2015 -2020. Strategic planning for HCWM covers waste handling, storage, transportation, treatment, and disposal, capacity-building and awareness creation. This prevent, reduce and mitigate the likely risks of transmission of infections.	Implementation of COVID-19 project has a potential to generate more infectious waste posing danger to the workers and public; thus the critical need for proper handling and management of waste associated with COVID-19 project.
5.	Policy Guideline on Blood Transfusion	The MoH has identified blood safety as a public health priority and hence developed this policy to guide in delivering this service efficiently, effectively and safely; through creating a strong, efficient and self-sustaining national blood transfusion services capable of meeting all the needs of the country.	Part of COVID-19 Emergency Response Project support will go towards strengthening the capacity of the Kenya National Blood Transfusion Service (KNBTS) to provide safe blood and blood products. Blood is core to all clinical aspects of health systems. As patients fall ill with COVID-19, many of whom will have co-morbidities, transfusions will be

#	Policy	Provision	Relevance
			needed.
6.	National Guidelines for the Management of COVID -19 Wastes, 2020	The Environmental Management and Coordination (Waste Management) Regulations of 2006, has clear provisions on the management of Biomedical waste. The provisions relate to segregation of biomedical waste, securing, packaging, storage and disposal of all generated medical waste within the country, to ensure proper waste disposal the main methods used are incineration, shredding, and chemical disinfection. To help implement the regulations, NEMA developed the guidelines to manage COVID-19 wastes.	The increased use of the safety materials against COVID-19 has led to massive generation of waste that can be considered as infectious waste (15%). These protective and safety materials are used across the Country in hospitals, shopping places, offices, and homes. Most of these are items especially the face masks are single use resulting in increased waste generation which if not well addressed could pose both cross infections and environmental risk.
7.	Proposed Guidelines on Planning and Design of COVID-19 Quarantine and Treatment Centers, and Long Term Infrastructural Interventions for the Kenyan Context, 2020	The objective is to provide quick and innovative infrastructure guidelines to public and private health care sector players in response to COVID-19. It gives the space consideration, site selections, planning considerations and innovative solutions for the quarantine / isolation areas. It further emphasizes the need to provide housing that meets the minimum public health requirements for habitation in both formal and informal settlements in order to meet social distancing.	COVID-19 ERP will adopt the space consideration, site selections, planning considerations and innovative solutions for the establishment of the quarantine / isolation areas (see section 4.1.1)

3.2 Regulatory Framework

Table 3-2: Regulatory Framework

#	Legislation	Provision	Relevance
1.	The Constitution of Kenya, 2010	<p>Article 42 of the Bill of Rights of the Kenyan Constitution provides that ‘every Kenyan has the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative and other measures’. Part 2 of Chapter 5 is dedicated to Environment and Natural Resources where Article 69 in Part 2 provides that the state shall;</p> <p>(v) Establish systems of environmental impact assessment, environmental audit and monitoring of the environment;</p> <p>In addition, Article 43 (1) provides that every person has the right to the highest attainable standard of health, which includes the right to health care services, including reproductive health care, accessible and adequate housing, and to reasonable standards of sanitation and to</p>	The project should ensure compliance with the Constitution on issues of environment protection, and safeguard of public health through provision of more comprehensive health services to every citizen.

#	Legislation	Provision	Relevance
		clean and safe water in adequate quantities.	
2.	National Infection Prevention and Control Guidelines for Health Care Services, 2015	Provides comprehensive standardized information regarding the prevention and control of transmissible infections. It acts as a central reference for all health care facilities and healthcare workers. The guideline is intended to provide administrators and Health Care Workers with the necessary information and procedures to implement Infection Prevention Control (IPC) core activities.	The project shall be reference for all health care facilities and workers with the necessary information and procedures of managing, handling and disposal of health care wastes to avoid infections.
3.	Environmental Management and Coordination Act, 1999 (Amendments 2015)	The Act empowers the National Environment Management Authority (NEMA) to exercise general supervision and co-ordination over all matters relating to the environment and to be the principal instrument of government in the implementation of all policies related to the environment. The Second Schedule to the Act specifies the projects for which an ESIA or environmental audit must be carried out.	The project shall comply with the provisions of this regulation on issues related to, environmental assessment, solid waste and waste water management, aerial emissions, noise and vibrations among others.
4.	Environmental (Impact Assessment and Audit) Regulations, 2019	This regulation provides guidelines to govern the conduct of Environmental Assessment and Audits in Kenya. Section 3 indicates that the regulations applies to policies, plans, programs, projects and activities specified in Part IV, Part V and 2nd schedule of the Act	Environmental Assessment shall be carried out for the project components and appropriate mitigation measures commensurate with the scale of the project implementation.
5.	Environmental Management and Coordination (Waste Management) Regulations, 2006	The regulations provide guidelines on waste management (handling, storage, transportation, treatment and disposal) of various waste streams including: domestic waste, industrial waste, hazardous and toxic waste, pesticides and toxic substances, biomedical wastes; and radioactive wastes.	The project will generate highly infectious waste (15-25%) as a result of management of COVID-19 cases from health facilities, the laboratories, and isolation and quarantine areas and hence expected to comply with the requirements of this regulation in management of medical wastes. During operational phase the project proponent would be required to obtain the licence to operate the waste treatment facilities installed under the project
6.	Environmental Management and Coordination (Air quality) Regulations, 2014	Provide for the prevention, control and abatement of air pollution to ensure clean and healthy ambient air. Part II sections 5 to 9 prohibits compromise of the ambient air quality levels specified in the first and third schedules of the regulations. Section 11 of the regulations prohibits offensive emissions into controlled areas (national parks, schools, hospitals, residential areas and populated urban centers)	<p>The project contractor during the construction or renovation of incinerators will abide with sections 33 & 35 of these regulations. During operational phase of the incinerators installed under the project MoH will ensure the incinerators are well maintained and fitted with scrubbers to limit release of air pollutants and should be within the tolerance limits in Schedule 1 of the Air Quality Regulations.</p> <p>The parameters in Kenya tolerance level are stringent than WBG EHS guidelines, where there is no indoor ambient AQ limits/standards that would apply to indoor</p>

#	Legislation	Provision	Relevance
			areas of HCFs in the Kenya standard; the WBG EHS limits shall prevail.
7.	Environmental Management and Coordination (Water Quality) Regulations, 2006	The regulation provides guidelines for the protection of sources of water for domestic use, water for industrial use and effluent discharge as well as water for agricultural use. Part II section 6 prohibits any person from discharging effluent from sewerage works, industry or other point sources into aquatic environment, abstract ground water near lakes, rivers, streams, springs and wells that is likely to have any adverse impact on quality and quantity of the water without an environmental impact assessment license.	In fulfilling the requirements of this regulations, the project proponent will have to undertake monitoring of both domestic water and waste water from the health facilities and laboratories to ensure compliance with the acceptable standards throughout the project life cycle. Necessary water supply or waste water discharge permits, and compliance with such permits shall be sought,
8.	Environmental Management and Coordination (Noise and Excessive Vibration Pollution) Regulations, 2009	Part II section 3(I) of these Regulations states that: no person shall make or cause to be made any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment and section 3(2) states that in determining whether noise is loud, unreasonable, unnecessary or unusual depends on; (i) the time of the day, (ii) proximity to residential area (iii) whether the noise is recurrent/constant, level/intensity of noise.	MoH will be required to take into consideration monitoring of the noise and vibrations levels within the project areas during construction and renovation period to ensure compliance.
9.	Water Act, 2016	Provides for regulation, management, conservation, use, and control of water resources, water and sewerage services. It enables for the monitoring, regulation and protection of water resources and sewerage services from adverse	The sub-projects will adhere to this act by obtaining the required water permits, including when abstraction of water is necessary from any water sources.
10.	Public Health Act (Cap 242) revised 2012	Part III of the Public Health Act provides for the protection of human health through prevention and guarding against introduction of infectious diseases into Kenya from outside, to promote public health and prevention, limitation or suppression of infectious, communicable or preventable disease within Kenya. The Public Health (Prevention, Control and Suppression of Covid-19) Rules, 2020 provides additional regulatory impetus to this part.	This applies to all projects with direct and indirect implication to the health workers and neighboring communities. MoH will be required to abide by these provisions throughout the project cycle.
11.	Health Act No. 21 of 2017	Part VIII on Promotion and Advancement of Public and Environmental Health – requires the state to develop the National health System that shall devise and implement measures to promote health and counter influences having an adverse effect on the health of the people (section 68)	Some of the sub-project will require carrying out Environment Assessment before renovation / construction of the HCF.
12.	Physical Planning Act, Cap 286 (Revised	The County Governments are empowered under Section 29 of the Act to prohibit or control the use and development of land and buildings in the interest of proper and orderly development of an	MoH is required to seek developments approval from the respective county physical planning departments for all the civil works (construction and renovation

#	Legislation	Provision	Relevance
	2012)	area.	activities) under the project.
13.	Penal Code (Cap 63)	Section 191/192 of the Penal Code states that any person or institution that voluntarily corrupts or foils water for public springs or reservoirs and pollutes air by noxious gas rendering it less fit for its ordinary use is guilty of an offence.	MoH shall comply with part II of this act with regard to obligations of the employer including Compensation for temporary total or partial disablement, treatment as well as provision of first Aid Services to workers.
14.	Work Injury Benefits Act, 2007	This act provide for compensation to employees for work related injuries and diseases contracted in the course of their employment and for connected purposes	MoH shall comply with part II of this act with regard to obligations of the employer including Compensation for temporary total or partial disablement, treatment as well as provision of first Aid Services to workers.
15.	Occupational Safety and Health Act, 2007	This is an Act of Parliament to provide for the safety, health and welfare of all workers and all persons lawfully present at workplaces. It applies to all workplaces where any person is at work, whether temporarily or permanently	All Safety and Health measures should be in place to ensure workers and the neighboring communities are not exposed to Safety and Health risks during project construction, operational and decommissioning phase namely: provision of appropriate PPE, training of workers, appointing health and safety committees and safety advisor where there are civil works, keeping incident logs and reporting to DOSHS and WB, registering work place and screening off active construction/renovation sites
16.	HIV/AIDs Prevention and Control Act, 2006	Part 11 Section 7 requires HIV and AIDs education in work places; specifically provision of basic information and instruction on HIV/AIDs prevention and control	During renovation / construction phase, the contractor is expected to create awareness to the employees and local community on issues related to HIV/AIDs.
17.	3.2.1 The County Government Act No. 17 of 2012	Part II of the Act empowers the county governments to be in charge of planning by coordinating and ensuring integrated planning within the county.	MoH is required to seek developments approval from the respective county physical planning departments for all civil works (construction and renovation activities) under the project
18.	National Construction Authority Act, 2011	The National Construction Authority Act 2011 seeks to regulate the construction industry and coordinate its development	MoH shall liaise with NCA to ensure licensed contractors are the ones to be awarded contract to renovate and or construct the sub-projects.
19.	The National Council for Disability Act, 2003	An Act to provide for the establishment of a National Council for Disability, its composition, functions and administration for the promotion of the rights of persons with disabilities set out in international conventions and legal instruments, the Constitution and other laws, and for other connected matters.	People with disability interest including access to the healthcare facilities will be catered for including the ramp, abolition and WASH facilities, as well as access to employment and healthcare services

3.3 Institutional Framework

Some of the institutions relevant to the proposed project are presented on Table 3.3 below:

Table 3-3: Institutional Framework

#	Legislation	Provision	Relevancy
1.	National Environment Management Authority (NEMA)	The responsibility of NEMA is to supervise and co-ordinate all matters relating to the environment and to be principle instrument of government in the implementation of policies relating to the environment.	Some of the sub-project that shall require major renovation / construction will undertake Environment Assessment and the report submitted to NEMA for review and issuance of License. NEMA also has the mandate for solid waste management, including hazardous waste and medical waste management
2.	Ministry of Health	The proposed project is under the Ministry of Health and it shall be the primary role of the Ministry to monitor and measure the progress of implementation of the social and environmental safeguards.	The Ministry, through the laboratories, hospital, isolation and quarantine areas management shall then prepare periodic reports, which shall be submitted, to the World Bank for review.
3.	County Governments	The County Governments have powers to control or prohibit all businesses, factories and other activities including the proposed project which by reason of smoke, fumes, gases, dust, noise or other cause, maybe or become a source of danger, discomfort or annoyance to the neighborhood and to prescribe conditions subject to which such activities shall be carried.	County Governments shall supervise project roll out within respective counties to ensure no activity being implemented shall not become a source of danger, discomfort or annoyance to the neighborhood.
4.	Directorate of Occupational Safety and Health Services (DOSHS)	The mandate of the Directorate is to ensure compliance with the provisions of the Occupational safety and health Act 2007 and promote safety and health of workers.	The occupier (MoH) shall need approval from DOSHS. Note that many of the selected areas are already in use and there they do have occupation certificate for the premises. The contractor will also be required to obtain work permit
5.	The National Construction Authority (NCA)	The NCA is responsible for issuing permits to construction sites and advising the government of Kenya on construction.	MoH shall liaise with NCA to ensure licensed contractors are the ones to be awarded contract to renovate and or construct the sub-projects

3.4 Relevant Social Statutes

The key social aspects of this project include inclusion, including of indigenous people otherwise known as vulnerable and marginalized groups/traditional minorities or historically underserved traditional local communities (HUTLCs); GBV/SHEA prevention, stakeholder engagement and feedback mechanism including GRM.

Table 3-4: Relevant Social Statutes

Social element	Legal/Regulatory framework	Institutional framework	Relevance
Inclusion (ethnicity, gender, age, location and disability)	<ul style="list-style-type: none"> -Constitution of Kenya, 2010 - Disabilities Act, 2014 -Kenya National Youth Charter 2013 -Kenya HIV/AIDS Prevention and Control Act 2006 -Health Act, No 21 of 2017 -Children's Act, 2001 -County Allocation of Revenue Act, 2017 -National Cohesion and Integration Act (No. 12 of 2008) 	<ul style="list-style-type: none"> -The State Department for Social Protection in the Ministry of Labor and Social Protection -National Council for Persons with Disabilities (NCPD) -National Cohesion and Integration Commission (NCIC) -Kenya National Human Rights and Equality Commission (KNCHR) 	<p>The legal and regulatory framework provides for a high standard health services to all the age cohorts including: senior citizens – both women and men, women of child bearing age, children and youth as provided by the KEPH adopted by Ministry of Health 2006.</p> <p>An assessment will be done on the social impacts of COVID-19 on all the affected groups. Specific instruments will be implemented to meet the needs of the various groups including information dissemination and feedback</p>
Gender-based violence and SEA	<ul style="list-style-type: none"> -Sexual Offences Act, 2006 -Penal Code -HIV/AIDS Prevention and Control Act 2000 -Protection Against Domestic Violence Act, 2015 -Prohibition of Genital Mutilation Act, 2011 -National Gender and Equality Act, 2011 	<ul style="list-style-type: none"> -The State Departments of Gender in the Ministry of Public Service and Gender -National Gender and Equality Commission (NGEC) 	<p>Abuse by workers (both foreign and national), normalization of GBV and lack of interest, stigma leads to non-reporting, poverty forces women/girls to engage in transactional sex</p> <p>Lack of access to services to address SEA, stigma, corruption</p>
Historically underserved traditional local communities (HUTLCs) or VMGs	<ul style="list-style-type: none"> -The CoK (Article 21.3). Specific provisions include: affirmative action programs and policies for minorities and marginalized groups (Articles 27.6 and 56); rights of “cultural or linguistic” communities to maintain their culture and language (Articles 7, 44.2 and 56) 	<ul style="list-style-type: none"> -There is no institution with any direct mandates be tied to the HUTLC. There implied mandates in the functions of the Kenya National Commission on Human Rights (KNCHR), and the National Land Commission (NLC), or in the functions of the Ministry of Sports Culture and Heritage and Ministry of Lands and Physical Planning 	<ul style="list-style-type: none"> -For many of the 14 priority counties for the project are home to HUTLCs that will need to be identified and included in all project activities -In each of the participating counties, a list of all VMGs will be generated and measures put in place to ensure that they access information and services through an affirmative action lens.
Public participation and consultations	<ul style="list-style-type: none"> -CoK, 2010, Article 10(2) a, b -County Public Participation Guidelines² 	<ul style="list-style-type: none"> -Every state actor is required to apply the national values and principles whenever they formulate, implement or 	<ul style="list-style-type: none"> -The project will put measures in place to consult communities on the project. The use of alternative means of consultation such as

² County Public Participation Guidelines, pg. (vii)

Social element	Legal/Regulatory framework	Institutional framework	Relevance
		interpret laws and policies -A complementary right is the right to access information in Article 35 ³	call-in will to be used to engage communities -CoK 2010 confers all the sovereign power to the people of Kenya and it is exercised through delegated power by the State actors ⁴
Grievance redress mechanism	-Employment Act in Part XII -Employment and Labour Relations Court Act -Labour Relations Act	- State Department of Labor (MLSP) -National Employment Authority -Kenya National Labor Board -Wages Council(s) -Directorate of Occupational Safety and Health Services (DOSHS) -National Council for Occupational Safety and Health (NACOSH) -Commission for the Administration of Justice -Ministry of Health	The SEP for this project has an elaborate GRM that will allow the PMT to manage grievances related to the project. However, if the complainant is dissatisfied with the decision made, he/she can make use of any of other institutions with a mandate to address disputes.

The relevant international conventions include: the African Charter on Human and Peoples' Rights (ACHPR, ratified in 1992), the International Labor Organization (ILO) convention 169, the United Nations Declaration on the Rights of Indigenous People (UNDRIP) of 1989, World Bank Policies and the Sustainable Development Goals (SDGs).

Article 22 of the ACHPR⁵ is the right to economic, social and cultural development. This right imposes on the State the duty to ensure that persons can exercise this right by participating in development. It is also contained in the preambles of the United Nations Convention on the Rights of Persons with Disabilities (CRPWD)⁶ and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)⁷.

3.5 World Bank Environmental and Social Standards (ESSs)

The World Bank Environmental and Social Safeguards (ESSs) will help the Bank to manage the risks and impacts of the projects, and improve their environmental and social performance, through a risk and outcomes based approach. This will ensure that proposed programs are environmentally and socially sustainable, and thus improve decision-making. These Environment and Social Safeguards are outlined below and ones to be triggered by the project, COVID-19 emergency operations are indicated.

³ Article 35(1)(a) and (b)

⁴ Article 1 of the Constitution of Kenya

⁵ Kenya has ratified the ACHPRs and it now forms part of the laws of Kenya by virtue of Article 2(8) of the Constitution of Kenya 2010.

⁶ Kenya has ratified the CRPWD

⁷ Kenya has ratified the CEDAW

Table 3-5: World Bank Environmental and Social Standards (ESSs) relevant to the project

#	ESSs	Relevant		Reason
		No	Yes	
1.	ESS1: Assessment and Management of Environmental and Social Risks and Impacts		√	<p>The project could also cause significant environment, social, Safety and Health risks due to the dangerous nature of the pathogen (COVID-19) and reagents and other materials to be used in the project-supported laboratories and quarantine facilities. Healthcare associated infections due to inadequate adherence to occupational Safety and Health standards can lead to illness and death among health and laboratory workers. The laboratories and relevant health facilities which will be used for COVID-19 diagnostic testing and isolation of patients can generate biological waste, chemical waste, and other hazardous bi-products. As the laboratories to be supported by the project will process COVID-19 that can have the potential to cause serious illness or potentially lethal harm to the laboratory staff and to the community, effective administrative and containment controls should be put in place so minimize these risks.</p> <p>Environmentally and socially sound healthcare including laboratory operations will require adequate provisions for minimization of occupational Safety and Health risks, proper management of hazardous waste and sharps, use of appropriate disinfectants, proper quarantine procedure for COVID-19, appropriate chemical and infectious substance handling and transportation procedures, institutional/implementation arrangement for environmental and social risks.</p> <p>An exclusion list for COVID-19 lab activities that may not be undertaken at the BSL2 labs unless the appropriate capacity and infrastructure is in place (e.g. BSL3 level).</p>
2.	ESS2: Labor and Working Conditions		√	<p>Most activities supported by the project will be conducted by health and laboratory workers, i.e. civil servants employed by the Government of Kenya. Although surge capacity workers will be contracted to provide clinical support, there will also be new ambulance teams, and new community health volunteers including the National Youth Service will be trained for data collection of cases in the community and contact tracing, and some construction workers and technicians will be contracted for the minor rehabilitation and training on operation of new equipment. The new contracted workers will have orientation on and sign a code of conduct on expected behavior and safety standards including GBV/SHEA risks. This will be outlined in the Labor Management Plan. Volunteers may also be used for information dissemination at the community level and they will require training and support.</p> <p>In line with ESS2 as well as the Kenyan law, the use of child labour and forced labour is prohibited in the project, both for construction and operation of healthcare facilities.</p> <p>The project will also ensure a basic, responsive GRM to allow workers to quickly inform their immediate management of labor issues, such as a lack of PPE and unreasonable overtime as well as to the national grievance hotline to the MoH.</p>
3.	ESS3: Resource Efficiency and Pollution Prevention and Management		√	<p>Medical and chemical waste (including water, reagents, infected materials, etc.) from the labs, quarantine, and screening posts to be supported (drugs, supplies and medical equipment) can have significant impact on environment and human health. Waste that may be generated from medical facilities/ labs could include liquid contaminated waste, chemicals and other hazardous materials, and other waste from labs and quarantine and isolation centers including of sharps, used in diagnosis and treatment. Each beneficiary medical facility/lab, following the requirements of the ESMF to be updated for the Project, WHO COVID-19 guidance documents, and other best international practices, will prepare site specific and</p>

#	ESSs	Relevant	Reason
			follow an Infection Control and Medical Waste Management Plan (ICMWP) to prevent or minimize such adverse impacts. The ESMF and site-specific instruments (ESMPs) will include guidance related to transportation and management of samples and medical goods or expired chemical products. Resources (water, air, etc.) used in quarantine facilities and labs will follow standards and measures in line with CDC and WHO environmental infection control guidelines for medical facilities.
4.	ESS4: Community Health and Safety	√	<p>In line with safety provisions in ESS2, it is equally important to ensure the safety of communities from COVID-19 infection.</p> <p>Medical wastes and general waste from the labs, health centers, and quarantine and isolation centers have a high potential of carrying micro-organisms that can infect the community at large if they are not properly disposed of. There is a possibility for the infectious micro-organism to be introduced into the environment if not well contained within the laboratory or due to accidents/ emergencies e.g. a fire response or natural phenomena event (e.g., seismic). The disposal of masks and gloves that are already in abundant use by community members will also need to be managed adequately to avoid contamination. The Infection Control and Waste Management Plan therefore describes:</p> <ul style="list-style-type: none"> • How Project activities will be carried out in a safe manner with (low) incidences of accidents and incidents in line with Good International Industry Practice (WHO guideline) • Measures in place to prevent or minimize the spread of infectious diseases. • Emergency preparedness measures. <p>Laboratories, quarantine and isolation centres, and screening posts, will thereby have to follow respective procedures with a focus on appropriate waste management of contaminated materials as well as protocols on the transport of samples and workers cleaning before leaving the work place back into their communities.</p> <p>The operation of quarantine and isolation centres needs to be implemented in a way that both, the wider public, as well as the quarantined patients are treated in line with international best practice as outlined in WHO guidelines referenced under ESS1.</p> <p>The project will ensure the avoidance of any form of Sexual Exploitation and all forms of Abuse by relying on the WHO Code of Ethics and Professional conduct for all workers in the quarantine facilities as well as the provision of gender-sensitive infrastructure such as segregated toilets and enough light in quarantine and isolation centres. There will be effort to put women and men in separate isolation rooms and to make special arrangements for children and young people. In as much as possible, measures should be put in place to have separate wash, meal, relaxation areas and sanitary conveniences for men and women.</p> <p>The project will also ensure via the above noted provisions, including stakeholder engagement, that quarantine and isolation centres and screening posts are operated effectively throughout the country, including in remote and PoE (border) areas, without aggravating potential conflicts between different groups, including host communities and quarantined people.</p> <p>In case quarantine and isolation centres are to be protected by security personnel or they are involved in enforcement of</p>

#	ESSs	Relevant		Reason
				<p>government directives or containment of possible social unrest, it will be ensured that the security personnel follow strict rules of engagement and avoid any escalation of situation, including providing training/guidelines.</p> <p>Project specific ESMPs will assess, as part of the environmental and social assessment, the potential cumulative impacts of water use upon communities, other users and the environment and will identify and implement appropriate mitigation measures, i.e. adopt water harvesting to the extent possible, adopt designs that encourage water use efficiency.</p> <p>The beneficiary HCFs shall adopt measures specified in the EHSGs to optimize energy usage, to the extent technically and financially feasible.</p>
5.	ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	X		All construction of isolation, quarantine and treatment centres, construction and /or installation of the waste treatment facilities will be undertaken within existing facilities, hence ESS5 is not considered relevant. Temporary closures, reduced access, or disruption will be conducted in consultative manner with the Project Affected People, ensuring no forced eviction takes place.
6.	ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	X		The civil works supported under this project (Component 3) include construction/renovations and equipping of Isolation rooms in all POEs, isolation rooms in all 14 high risk counties, strengthening capacity of selected existing health facilities Based on the potential and known locations of these sites, are not likely to impacts on natural resources and biodiversity due to the implementation of infection control and waste management plan.
7.	ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (HUTLCs)		√	<p>The CoK refers to these groups as vulnerable and marginalized groups and provides guidance on their involvement and inclusion in development. All aspects of this project including labor, and community health and safety should give due consideration to the VMGs/HUTLCs</p> <p>This will focus on ensuring that HUTLCs have access to information and services: hunter-gatherers, forest dwellers (e.g. the Sengwer, Ogiek, Waatha), and nomadic pastoralists.</p> <p>Information should be provided in languages and channels accessible to these communities, including for those who are illiterate. Measures should be put in place to capture feedback from these communities.</p> <p>Local employment should ensure that members of the HUTLCs are considered and are given equal opportunities in the workplace.</p>
8.	ESS8: Cultural Heritage	X		Based on the screening of potential and known locations for rehabilitation and construction works, there is no likely impact on cultural heritage.
9.	ESS9: Financial Intermediaries	X		This standard is not currently relevant for the proposed project interventions.

#	ESSs	Relevant		Reason
10.	ESS10: Stakeholder Engagement and Information Disclosure		√	<p>The project has established a structured approach to engagement with stakeholders (see Stakeholder Engagement Plan) that is based upon meaningful consultation and disclosure of appropriate information, considering the specific challenges associated with COVID-19.</p> <p>The government has developed a draft National Risk Communication and Community Engagement (RCCE) Strategy based on the WHO guidelines. The project will support this and ensure that its implementation includes VMGs and feedback mechanisms. The prepared Stakeholder Engagement Plan (SEP) describes the framework for these activities.</p>

3.6 World Bank Guidelines for the ESF

- The World Bank Group (WBG) general EHS guidelines contain performance levels and measures for development of projects and are considered to be achievable in facilities at reasonable costs by existing technology. WBG guidelines apply to specified sub-project components of COVID-19 ERP, especially component 3 on civil works and renovation of the quarantine, isolation and treatment centres and in construction of waste treatment facilities and component 4 on medical waste management. Among the applicable guidelines include: Environmental (EHS Guidelines - Waste Management, EHS Guidelines - Hazardous Materials Management, EHS guidelines- Air emissions and Ambient air quality), Community Health and safety (water quality and availability, traffic safety, emergency preparedness and response), EHS Guidelines -Construction and Decommissioning.
- World Bank Group EHS Guidelines - Healthcare Facilities

Other World Bank guidance notes applicable to this project include:

- World Bank Guidance note on COVID-19 and CIVIL works
- Guidelines on Prevention of GBV/SEA
- World Bank Good Practice Note on Road Safety.
- Technical Note on Public Consultations and Stakeholder Engagement in WB -supported operations when there are constraints on conducting public meetings.

3.7 Relevant international conventions and laws ratified by Kenya

As Kenya is a signatory to various international conventions and laws, it is important that national projects are in line with these laws. Some of the international and regional conventions relevant to the project that Kenya has adopted are summarized below:

3.7.1 Bamako Convention, 1991

The Bamako Convention on the Import into Africa and the Control of Trans-boundary Movement and Management of Hazardous Waste within Africa is a treaty of African nations prohibiting the import of any hazardous waste and Kenya is a signatory to it. The convention was negotiated by 12 nations of the Organization of African Unity (OAU) in Bamako in January 1991 and came into force in 1998. Parties to this convention are mindful of the growing threat to health and environment posed by the increased generation and complexity of hazardous waste, hence prohibits all imports of hazardous waste.

3.7.2 Stockholm Convention on Persistent Organic Pollutants

The Convention is a global treaty to protect human health and environment from Persistent Organic Pollutants (POPs). POPs are chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of living organisms and are toxic to human and wildlife. Under Article 5 and Annex C governments that are party to the Convention are required to reduce or eliminate release from unintentional production of POPs in particular polychlorinated dibenzo-p-dioxins and dibenzofurans which are formed and released to the environment by medical waste incinerators and other combustion processes.

MoH will use the best available techniques and promote best environmental waste management practices (source reduction, segregation, resource recovery and recycling, training, and proper collection and transport of waste generated from the project sites) in management of healthcare waste before treatment through incineration.

3.7.3 World Health Organization Guidelines for COVID-19 Prevention and Management

This section provides the highlights of the World Health Organization Guidelines for COVID-19 Prevention and Management, full documents can be accessed on the links provided on Annex V.

WHO Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19): Aimed at providing interim guidance on laboratory biosafety related to the testing of clinical specimens of patients that meet the case definition of coronavirus disease 2019 (COVID-19).

WHO Infection prevention and control during health care when COVID-19 is suspected: Intended for health care workers (HCWs), health care managers, and IPC teams at the facility level, national, provincial and district levels.

WHO rights, roles & responsibilities of HCWs, including key considerations for OSH in COVID-19 Outbreak: Provides specific measures to maintain rights and responsibilities of HCWs and their OSH.

WHO Water, sanitation, hygiene, and waste management for the COVID-19 virus: Intended for water and sanitation practitioners and providers and health care providers to ensure good and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, and health care facilities to help prevent human-to-human transmission of the COVID-19 virus.

WHO Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19): Intended for those involved in distributing and managing PPE and its most appropriate use by public health authorities and individuals in health care and community settings.

WHO Oxygen sources and distribution for COVID-19 treatment centers: Intended for health facility administrators, clinical decision-makers, and procurement officers, planning officers, biomedical engineers, infrastructure engineers and policy-makers. It describes how to: quantify oxygen demand, to identify oxygen sources that are available, and select appropriate surge sources to best respond to COVID-19 patients' needs, especially in low-and-middle income countries.

WHO Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19): Aimed to offer guidance to WHO Member States on implementing quarantine measures for individuals in the context of COVID-19 outbreak.

WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19: intended for those, including managers of health care facilities and mortuaries, religious and public health authorities, and families, who tend to the bodies of persons who have died of suspected or confirmed COVID-19.

4 Potential Environmental and Social Risks and Mitigation Measures

Potential environmental and social risks can be adequately managed by integrating environmental and social due diligence into the sub-project cycle. Since the exact participating facilities and their location are not yet known an ESMF has been prepared with an ESMP (Annex II) and an Infection Control and Waste Management Plan (ICWMP) (Annex III) have also been prepared for this project. The potential risks have been grouped into different stages: Planning and Design, Construction (should any civil works be involved), Operational and Decommissioning phase to adequately evaluate the potential risks. The ESMF and ICWMP provides general mitigation measures for similar potential risks and impacts and both apply to the project.

4.1 Planning and Design Stage

4.1.1 Poor site selection of the COVID-19 health, quarantine and isolation facilities

The project has identified 14 high risk counties where construction and rehabilitation of the healthcare facilities, isolation and quarantine areas will be implemented as well as at the POEs among other additional sites. The specific locations where the sub-projects will be implemented have not yet been identified but priority will be given to health facilities of Level 5 and level 4 with high volume of patients.

It is important that the location of healthcare facilities be clearly communicated to ensure an understanding of why the areas have been chosen due to concerns about equity of provision and safety concerns of neighboring populations. If the selection of the site does not follow the due process it may lead to location within sensitive areas like densely populated areas and lack of WASH facilities such as water, sewerage and waste disposal facilities which may exacerbate the spread of COVID-19.

Mitigation Measures

- Renovate the requisite facilities and ensure safe and adequate space for quarantine of necessary number of individuals,
- Security measures should be enhanced around the quarantine areas,
- People living in the environs of a quarantine/isolation centres and health facilities shall be given accurate information on the pandemic and receive updates on COVID-19.
- Provide appropriate and minimum recommended PPEs such as medical mask, gown, heavy duty gloves, eye protection and boots to all staff at the facility.
- Supplies needed to sustain quarantine should be easily delivered on need basis. Food, water and sanitation requirements are among the basics supplies for quarantine areas.
- Provide psycho social support to the neighboring communities ,
- Renovate the facilities to meet the special needs of the quarantined population (e.g. children, pregnant women, people with disabilities, and differing cultures and religions) shall be considered and prioritized.
- Ensure availability of adequate healthcare waste handling and management at the sites.
- Renovate the facilities to meet the requirements on spatial separation between patients and clinicians,

In some cases, facilities at PoE, Hotels and Stadiums may be selected to act as Isolation and Quarantine Areas. It is recommended that a quarantine facility should be of:

- At least 3 SQM of space per person for personal space at a quarantine site exclusive of space required for eating, recreation, offices or ancillary services;
- Isolated en-suite rooms with wash room facilities;

- A dormitory set-up with a maximum of 5 -10 beds per room or zone separated from one another by a curtain or wall with each bed separated by a minimum of 1metre from all sides;
- There shall be several controlled access point into the field / Tent hospital / isolation/quarantine areas with the following components:
 - Critical and high risk areas like the isolation/ treatment wards may be cordoned off with security wire within the general secure facility in which the field hospital is set up, in this instance most likely a school or stadium setting;
 - Separate access for patients and health workers as well as a separate exit point for any recovered cases; and
 - The security workers may also be housed within the tents manning the access points, with small armory, usually within a vehicle.

4.1.2 Improper design and functional layout of healthcare facilities

Design layout consideration for the facilities handling COVID-19 is crucial in managing the transmission from one person to another; if this element is not considered more cases may be reported from the isolation, quarantine and health facilities. The Environment and Social Standard 4 on Community Health and Safety provides guidelines applicable for planning on new constructions and renovations. In order to promote structural and equipment design and safety the following measures have been recommended for consideration during project planning phase⁸.

- The design, construction, operation and decommissioning of the project activities shall follow the national legal requirements, the WBG EHS guidelines and other good international industry practices.
- Structural elements of the project shall be constructed by a competent professional certified and approved by National Construction Authority.
- All structural designs and construction works shall promote quality and safety, and other considerations relating to climate change.
- The designs of the new buildings with free public access shall consider the risks of potential exposure to operational accidents or natural hazards such as extreme weather events.
- All the new construction designs shall consider the concept of universal access that allows for unimpeded access for all people of different ages and abilities. This shall include provision of the ramps, elevators and toilets for the disabled.
- Quarantine facility shall offer at least 3 SQM of space per person for personal space at a quarantine site exclusive of space required for eating, recreation, offices or ancillary services⁹.
- An option of isolated ensuite rooms with wash room facilities is preferred.
- A dormitory set-up with a maximum of 5 -10 beds per room or zone separated from one another by a curtain or wall with each bed separated by a minimum of 1metre from all sides with adequate wash room facilities shall be constructed.
- Ideally be under negative air pressure (neutral pressure may be used, but positive pressure rooms should be avoided);
- Be sited away from busy areas (areas used by many people) or close to vulnerable or high-risk patients, to minimize chances of infection spread;
- Have dedicated equipment for the patients (for example blood pressure machine, peak flow meter and stethoscope), but should avoid excess equipment or soft furnishings;
- Have signs on doors to control entry to the room, with the door kept closed;

⁸ Refer to ESS 4 Community Health and Safety

⁹ Guidelines on Planning and Design of Covid-19 Quarantine and Treatment Centres, and Long Term Infrastructural Interventions for the Kenyan Context, 2020.

- Have an ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment.

Detailed design requirements can be found in these resource list:

- [Infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#), issued on March 19, 2020
- [Severe Acute Respiratory Infections Treatment Center](#), issued on March 28, 2020
- [Infection prevention and control at health care facilities \(with a focus on settings with limited resources\)](#), issued in 2018
- [Considerations for quarantine of individuals in the context of containment for coronavirus disease \(COVID-19\)](#), issued on March 19, 2020
- [Water, sanitation, hygiene and waste management for COVID-19](#), issued on March 19, 2020
- [Laboratory biosafety guidance related to coronavirus disease 2019 \(COVID-19\)](#), issued on March 18, 2020.

4.1.3 Nosocomial Infection¹⁰ Control

Health services (public and private facilities) are expected to meet quality standards of ISO 9000 and ISO 14000 series although this is not the case in most health facilities in the developing countries. Thus all the construction and renovations activities under the project are expected to take into consideration and attempt to conceptually meet the required ISO standards. To achieve this construction/renovation plans and designs that shall be prepared for the isolation /quarantine units in the health facilities should be reviewed and approved by an infection control personnel/public health to ensure the required measures are adequately incorporated in the designs. These guidelines advice on the design and functional layout of the health facilities to reduce on nosocomial or other health- care associated infections (HAIs):

- Building designs of the renovated health facilities shall be in line with the national building code and the standard health care setting building designs. The design contracts should include sustainability considerations especially on use of energy and water to the extent possible,
- Traffic flow shall be considered to minimize exposure of high risk patients and facilitate patient transport.
- Adequate spatial separation of patients is key, the patients care areas shall be stratified by risk of the patient population for acquisition of infections. The four main degrees of risk to be considered include; Low risk areas e.g. administrative sections, moderate risks e.g. regular patient units, high risk areas e.g. isolation units, intensive care units, very high risk e.g. operating rooms.
- Adequate number and type of isolation rooms shall be provided with a minimum of least 1 meter space separation between patients to reduce on transmission of infections as well as allow ease in access of health care workers to attend to patients. The facility design shall also be easily accessible by the elderly as well as the persons with disability.
- Health facilities shall have appropriate access to hand washing facilities with running water and hand hygiene supplies provided. Hand hygiene is extremely important in prevention against COVID-19.
- Choice of construction materials for covering the internal surfaces (floors/walls) shall be easy to clean and resistant to hot water, detergents and disinfectants. The walls floors and ceiling surfaces as well as furniture and equipment used for patient care shall be smooth, made of non-porous material, easy to clean and do not provide suitable environment for pathogen survival.

¹⁰ Nosocomial infection can be described as an infection acquired in hospital by a patient who was admitted for a reason other than that infection. Also called “hospital acquired infection”.

- Appropriate ventilation for isolation rooms and special patient care areas such as operating theatres and the transplant units) shall be acquired. Adequate ventilation systems require proper designs and maintenance to minimize risk of contamination and may help reduce spread of pathogens.
- Water supply to the health facility shall be reliable and to the required standards to limit risk of infections. This can be achieved through treatment of water taken from the public network to ensure that the physical, chemical and bacteriological characteristics of water used in the health care institutions meet the local regulations, (WHO, 2002), EMCA on Water Quality Regulations 2006.
- Lighting system of the health care facility shall be sufficient to ensure safe working conditions and security.
- Provision of adequate and accessible toilets taking into consideration the gender aspect including separate facilities for confirmed and suspected cases of COVID -19; and
- Provide separate spaces of children and young people to ensure their safety while in the health facilities.
- Provision of the right cleaning and disinfection chemicals and equipment.
- In operating theatres and rooms for isolating particularly vulnerable patients (e.g. severely immune-compromised patients) they may require positive air pressure conditions, where clean air is drawn into the room, thus avoiding contaminated air entering from other parts of the health care setting,
- It would be critical to have separate rooms for children and young people and special care given to members of VMGs and other vulnerable people such as persons with disabilities and older persons.
- Provision of the right receptacles for waste handling and containment including considerations on waste transfer to provide for minimal disruptions and avoidance of contamination of clean areas during waste collection and on site transportation.
- Provisions relating to putting in place other standard precautions must be ensured in order to assure cutting transmission of such nosocomial infections.

Special considerations will be made for the vulnerable groups during delivery of these services. It will be important for the service providers to ensure that there is a member amongst their ranks to communicate to people who do understand Kiswahili and/or English. The PMT and contractors will undertake its activities with due respect of the member of HUTLC/VMG groups. If medical equipment is in short supply, there will be a need to clearly communicate how it will be allocated among geographical locations and among groups. Random testing shall also be clearly explained.

4.1.4 Improper selection, design and operation of Medical Waste Treatment Facility

Some of the selected beneficiary healthcare facilities considered under the project may have dedicated healthcare waste management systems which are functional or may contract healthcare waste handlers for off-site healthcare waste treatment and disposal. Poor selection of the sites designs and operation may lead to improper healthcare waste management systems and potential environmental pollution and public health risks associated with improper medical waste management. The project will support the selected healthcare facilities/ laboratories with no appropriate waste treatment facilities through installation of treatment facilities depending on the needs assessment.

Mitigation measures

- Due diligence will be undertaken for existing facilities to check on the efficiency of waste management systems for waste treated on-site and for off-site transportation for treatment and

final disposal using registered waste transport and disposal companies to determine if the existing practices are aligned with the national guidelines, WBG EHS guidelines and WB ESF,

- The design and technology to be selected will be based on available supporting infrastructure and resources (reliable resources of power, fuel, skilled technicians and operators),
- Carry out Environment and Social Impact Assessment for construction and/or installation of the site specific waste treatment facilities, capturing clear analysis of design alternatives and site selection process,
- In the case of incinerators, site selection is important and should consider the prevailing winds which should blow away from occupied buildings to limit exposure to emissions, siting location must be compatible with the premises neighborhood,
- Due diligence of the suppliers must be undertaken to ensure procurement of good quality waste treatment equipment and provide the necessary service and support such as the warranty period, servicing and maintenance of the equipment and training of the operators,
- Ensure there is adequate storage area of healthcare waste to accommodate peak waste generated due to increased patient intake in comparison to the average monthly medical waste generated,
- Undertake environmental and social audits on the waste treatment facilities and acquire the necessary license to operate the waste treatment facility from NEMA in line with EMCA Waste Management Regulations, 2006,
- The counties/beneficiary health facilities, laboratories should provide the budget to maintain, repair and operate the treatment facilities,
- Train all staff involved in the operation of waste treatment facilities such as incinerators and provide them with the appropriate required PPEs,

4.2 Construction Stage Environment and Social Risks and Impacts

This section highlights the key environment and social risks and impacts associated with construction (including expansion, upgrading and rehabilitation) of healthcare facilities, isolation, quarantine areas and related waste management facilities and the respective generic mitigation measures. These risks and impacts may include those listed below:

4.2.1 Clearing of Vegetation and Trees

Project will involve the use of construction materials extracted from the environment: including sand, water, timber, stone aggregates and brick; there is potential of clearance of vegetation cover to access these resources or to provide the material lay down areas.

Mitigation measures

- Confine construction activities within the immediate project site.
- Plant vegetation cover at affected areas during project closure.
- Acquire construction materials from the licensed quarries and/or suppliers.

4.2.2 Resource Efficiency and Material Supply

Renovation and up-grading of the health, laboratory, PoE, ambulance command centres, isolation and quarantine facilities and construction of waste treatment facility housing will involve the use of raw materials such as: cement, sand, wood, metal, iron sheet among other construction materials. These materials, if not planned carefully, may lead to wasteful use, acquisition of exclusion list and un-utilized materials at the site like stones, sand, wood, metals among others.

Mitigation measures

- Adhere to the procurement plan for acquisition of all resources and materials.
- Source building materials from local suppliers who to extent possible use environmentally friendly processes in their operations and are licensed by relevant national agencies / authorities,
- Restrict the sourcing of materials from registered and NEMA licensed quarry areas and /or suppliers,
- Ensure accurate budgeting and estimation of actual construction material requirements,
- Ensure that damage or loss of materials at the construction site is kept minimal through procurement of small quantities and proper storage,
- The design contracts should include sustainability considerations for the service providers installing the medical equipment and waste treatment facilities, in particular the given HCF costs and opportunities related to use of energy and water and
- Do not to extent possible open new material sites for the project, unless licensed.

4.2.3 Improper management of construction related solid wastes

Solid waste generated during construction including: papers used for packing, plastics, scrap wood, glass cullet, metal and demolition debris. Dumping around the site will interfere with the aesthetic status and has a direct effect on the surrounding community. Disposal of the same solid wastes off-site could also be a social inconvenience if done in the wrong places. The off-site effects could be vector or pest breeding, pollution of physical environment including water resource, invasion of scavengers and informal recycling by communities.

Mitigation measures

- Contractor shall prepare waste management plan to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any works, which should promote waste minimization and recycling.
- Contractor shall be responsible for handling and disposal of all construction and related waste.
- Encourage efficient use of materials to as much as possible avoid and minimize waste production.
- Ensure waste are recycled / reused before opting to dispose of.
- Designate temporal waste / garbage holding areas at site.
- Use of waste receptacles that encourage segregation to hold waste on site before its collection.
- Use of durable, long-lasting materials that shall not need to be replaced often.
- Engage NEMA registered waste contractor to dispose of hazardous waste and have waste destruction certificate and waste transfer notes.
- Waste disposal by burning shall not be permitted and signage should be erected.

4.2.4 Waste Water Management

Waste water may not pose considerable disposal challenge since all facilities being renovated may have an on-site septic systems or sewage lagoons. However, it is envisaged that during renovation and construction activities, contaminated waste water may originate from the health facilities, PoE, laboratory, quarantine and isolation facility which may not be directed to a drainage channel; this may pose challenge as it may mix with the storm water courses.

Mitigation Measures

- All waste water from the construction sites will be stored according to the containment measures to mitigate soil and water contamination.

- All infectious effluents shall be discharged into the sewerage system or soak pits only after being treated and tested according to WHO standards/Water Regulations, 2006. Contractor will direct waste water to the sewer system or as advised by the hospital management.
- Ensure provision of clean sanitary facilities for workers,
- Siting of ash pits should take consideration of the water table to avoid risks of underground water contamination

4.2.5 Noise and Vibration

During renovation and construction activities, noise and vibration may be caused by the operation of pile drivers, earth moving and excavation equipment, demolition activities, concrete mixers, cranes and the transportation of construction equipment, materials and people.

Mitigation measures

- Notify the public of the intended works prior to beginning construction.
- Ensure that noise & vibration levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.
- Maintain the construction equipment in good working conditions as per the operation manual.
- Provide fit to work PPEs for all workers involved in the areas with elevated hazard levels.
- Construction workers should be aware of the sensitive nature of work place they are operating in and advised to limit verbal and other forms of noise.
- Contractor will coordinate with the HCF staff as to determining timing and more importantly what specific noise controls and mitigations may be needed (beyond standard construction measures)

4.2.6 Dust and Emission Management

Project will involve demolition of walls inside existing healthcare, laboratories, PoE facilities and this could generate fugitive dust affecting adjoining rooms or service areas. A secondary source of emissions may include exhaust from diesel engines of earth moving equipment, as well as from open burning of construction and demolition waste on-site.

Mitigation measures

- Careful screening of construction site to contain and arrest construction-related dust.
- Strict measures shall be applied for the handling of construction materials in powder form such as cement, lime, concrete additives, etc.
- Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or covered by tarpaulin while on transit.
- Wet all active construction areas as and when necessary to lay off dust.
- Vehicle speeds shall be limited to a maximum of 30km/h.
- Wet all access roads during hauling of construction material during dry days.
- Maintain periodically all equipment and machinery as per the operation manual.

4.2.7 Hazardous Materials Management

The renovation of the existing healthcare facilities may lead to generation of hazardous waste (Asbestos Containing Materials (ACM)); as is the commonest roofing materials for Level 4 health facilities. Other hazardous waste may include fuels, oils and lubricant leakages or oil contaminated materials.

Mitigation measures.

- Any hazardous materials shall be handled by NEMA licensed waste-handlers, as per agreement between the project and the County government,
- Asbestos materials safe handling, management and disposal shall be undertaken following the NEMA guidelines on asbestos management and the WBG EHS guidelines.
- If ACM at a given hospital is to be removed or repaired, the MoH will stipulate required removal and repair procedures in the contractor's contract,
- Ensure specific clause in construction contract to deal with ACM in the specific HCF, as this would be (unless known at the time of bidding) an additional cost (scope) item which needs to be included in the bids,
- Contractors will remove or repair ACM strictly in accordance with their contract. Removal personnel will have proper training prior to removal of ACM,
- If the ACM is to be temporarily stored on site, the waste should be securely enclosed inside closed containments and marked appropriately,
- All asbestos waste and products containing asbestos is to be buried at a licensed landfill and not to be tampered or broken down to ensure no fibers are airborne,
- Contractors must provide suitable containment and storage of chemicals and hydrocarbons to prevent soil contamination and pollution to ground or water (surface and ground).
- All workers shall be provided with fit for work PPEs required when handling ACM,
- Train staff on containment and spill response of hazardous waste and management,
- Construct ash pits for disposal of the hazardous waste (incinerator ash) from the waste treatment facilities.

4.2.8 Temporary disruption of healthcare services

Since facilities under renovation would not be closed, modifications of buildings in which medical services are provided may entail moving patients or equipment from one area or room to another. This may cause temporary disruption in delivery of health services to patients at facilities under renovation. Temporary rearrangement of service areas can have the undesirable consequence of slowing down emergency services or cause inability among health workers to efficiently offer necessary treatment for visiting patients. Movement of equipment may cause their damage.

This impact is short-term but can have long-term and irreversible impacts (such as where human life is lost). Extent of this impact will be mostly local to facilities under renovation although, due to the disturbance, some patients might choose to transfer to alternative healthcare facilities, leading to their congestion. The impact will potentially occur at every facility in this project. Likelihood of the impact occurring is high and significance is therefore predicted to be medium-high.

Mitigation measures

- Plan pre-construction activities shall be done early to identify suitable rooms or adjoining buildings into which patients or service areas can be relocated with minimal inconvenience, especially to patients under intensive care.
- Advance relocation information shall be shared with the affected patients for their planning and mental preparedness.
- Contractors shall work closely and harmoniously with healthcare facility administrators to find practical ways to minimize social cost of temporary disruption of services.
- A grievance mechanism to address complaints from community shall be in place and awareness promoted.

4.2.9 Occupational Safety and Health (OSH) Risks

At all sites, renovation works may have the following occupational Safety and Health risks with potential to cause serious injuries to workers:

- Exposure to asbestos containing materials;
- Burns from welding (hot works);
- Falls from working at heights or wet surfaces;
- Electrocution;
- Noise and body vibration during demolition;
- Injury from falling or flying debris when demolishing walls;
- Transient pools of water that may become breeding ground for mosquitoes; and
- Traffic accidents.

The OSH impacts could potentially occur at every facility under renovation and while some accidents could be minor and not life threatening, others can be grave leading to permanent disability or loss of life of construction workers. Kenya and WBG EHS Guidelines require that workers exposed to Safety and Health risks are given proper personal protection Equipment (PPE). Related OSH safeguards are comprised in (Kenya's) Occupational Safety & Health Act (2007), Employment Act, 2007, Work Injury Benefic Act (WIBA), 2007 and Labor Relations Act, 2007.

Duration of the impact will be short-term occurring only during the construction phase. Extent of the impact will be local or national depending on origin of construction workers. The likelihood of the impact occurring is medium considering the usually low level of safety at construction sites in Kenya. Significance of this impact is therefore predicted to be high.

Mitigation measures

- The contractor shall prepare a OSH plan for the construction works, and should include input from HCF personnel on potential health and safety risks associated with the HCF
- Restricting access to active renovation sites, including establishment of security perimeter.
- Use institutional and administrative controls with a focus of high risk areas including:
 - Screening off or fencing the site, and
 - Provision of adequate signage and communication of risks to workers, patients and the health community.
- The HCF staff, key service providers and the public should be notified of the works through appropriate publicly accessible sites such as the main entrance to the health facility.
- Barricading the work areas to prevent entry of health staff and patients in the work sites.
- Place adequate signboards to divert staff and passengers away from the work sites.
- Use of screens/nets to avoid flying debris, ensure good housekeeping in the construction sites.
- All workers should be adequately trained on the use of PPEs which they should wear at all times while at the work site.
- Contractor shall provide on-site toilet and washing water for workers.
- The water storage tank shall be covered and properly managed to minimize mosquitoes breeding.
- Traffic safety plan shall be established for each site by the contractor.
- Safety perimeters shall be established around the hazardous areas (around overall construction site, at heights, around wet surfaces, excavated areas, etc.).
- Each site must maintain logs of injuries and fatalities.
- Each site must establish a grievance redress mechanism to allow workers to raise safety issues and propose improvements on site.
- A Safety and Health officer shall be designated at each site by the contractor.

- At each site, the contractor must identify the nearest health centre to be used for treating any work related injuries.
- Each laborer, permanent or temporary must sign a code of conduct, plus employment of each laborer must include on-boarding and daily safety briefings.

4.2.10 Community exposure to work related hazards

Renovation works would not close off visits to healthcare facilities by healthcare staff, service providers and patients neither would inpatients be required to vacate facilities being worked on. For facilities where renovation entails modification of internal built environment, it is planned to temporarily relocate patients and medical services to adjoining rooms to allow demolition and reconstruction. Construction work undertaken in the same buildings having patients has potential to cause injuries to patients or health workers.

Mitigation measures

To mitigate this impact, the WBG EHS guidelines recommend measures to protect healthcare workers, patients and communities from general site hazards associated with site under renovation though the use of both institutional and administrative controls with a focus of high risk areas including:

- Restricting access to active renovation sites, including screening off the building being renovated or fencing the entire site to limit public access that is appropriate to the site;
- Use institutional and administrative controls with a focus of high risk areas including:
 - ✓ Provision of adequate signage and communication of risks to workers, patients and the health community;
- The public shall be notified of the works through appropriate publicly accessible sites such as the main entrance to the health facility;
- Contractors shall ensure measures on Safety and Health are enhanced such as; barricading the work areas to prevent entry of health staff and patients in the work sites, ensure safe access to the health facility if the building will be open to public;
- The contractor shall place adequate signboards to divert staff and passengers away from the work sites;
- Use of screens/nets to avoid flying debris, ensure good housekeeping in the construction sites;
- All workers shall be adequately trained on the use of PPEs which they should wear at all times while at the work site;
- Only authorized visitors shall access the site and wear basic PPE all the time;
- Construction workers shall be aware of the sensitive nature of workplace they are operating in and advised to limit verbal noise; and
- Contractor shall work closely with the administrators of health facilities to find practical ways to minimize temporal services disruption at the hospitals.

4.2.11 Community exposure to health issues

During project construction phase people may associate while undertaking construction and rehabilitation tasks. These associations between migrant workers and the local community may lead to infection with COVID-19. In addition, close associations between workers and community members could lead to other health risks including Sexually Transmitted Diseases (STD) such as HIV/AIDS, which should also be addressed. Workers could also infect the community during off-work interactions and perpetrate sexual harassment, exploitation and abuse.

Mitigation measures

- Appropriate timely information be provided at all levels on risks of infection between community members and workers.
- Raise awareness on appropriate behavior including prevention of infectious diseases and sexual harassment, exploitation and abuse.
- Carry out HIV/AIDS awareness and control campaigns in the project targeting workers.
- Have VCT services on site and encourage workers to undergo testing.
- Provision of protective devices such as condoms.
- Contractor code of conduct to promote appropriate behavior and ensure compliance with COVID 19 prevention measures.
- In cases of COVID-19 at the construction sites, guidelines have been provided in this ESMF Annex III: Infection, Prevention and Control Protocol on minimization of exposure, training of staff and precautions and management of access and spread.

4.2.12 Traffic and Road Safety

Most of the health facilities are located within the central business districts of the counties with potential human activity at the access gate to the health facilities. Transport of construction materials to the site is expected to happen occasionally and during these days the increased traffic use of the road by the material haulage trucks will affect movement of normal traffic to the health facilities, ports of entry as well as the safety of road users. This would contribute to increased community risk of traffic related accidents (break failure, falling of construction material from trucks) especially to the children, PWDs and older people. In addition, ambulance drivers employed by the project should be oriented in appropriate road safety measures.

Mitigation measures

- The contractor and the respective management of the health facilities shall develop traffic management plan through segregating traffic safety, machine operation and walking areas to reduce on conflicts. This can be achieved through use of one-way traffic routes, establishment of speed limits and onsite trained flag personnel wearing high visibility vests to direct traffic.
- Contractor shall avoid the hospital peak hours for transport of the construction materials.
- Warning signs shall be provided at the access roads to warn road users of heavy vehicles during transportation of construction material and equipment.
- Contractor shall emphasize safety aspects among project drivers especially speed limits to the health facilities.
- Contractors shall regularly inspect vehicle safety and employ trained drivers to minimize the accidents.
- Trucks shall be covered with tarpaulin and have tail gates during haulage of construction materials and access roads sprayed with water to reduce on dust levels.
- Deploy flagmen at strategic areas during peak hours.
- Ambulance drivers should follow guidance on safe emergency driving.

4.2.13 Involuntary Land acquisition

No land acquisition or displacement is anticipated.

4.2.14 Labor Influx and Disruption of Social Ties through quarantine and isolation centers

The construction or re-modeling of the isolation, quarantine, PoE, health and laboratory facilities will cause labor influx depending on the investment and the skill set required. It is critical that the recruitment

of the labor force factors in the engagement of local people as appropriate. The Labor Management Procedures (LMP) for this project has provided the necessary provisions to be referenced by the contractors and the PMT.

It is also notable that the current quarantine of contacts through tracing for 14 days will have adverse impacts on the livelihoods of the affected households. In some cases, entire households may be placed in isolation. It is critical for the PMT to not only consider the safety of those in quarantine but also to factor in the payment for the facilities and their mental well-being. Secondly, the operation of quarantine and isolation centers needs to be implemented in a way that both the wider public, as well as the quarantined patients/persons are treated in line with international best practice as outlined in WHO guidelines referenced under ESS1. There is a need to guarantee human rights and dignity of patients, their relatives and dead people who succumb to COVID-19 or its complications.

The project will ensure the avoidance of any form of SHEA by relying on the WHO Code of Ethics and Professional conduct for all workers in the quarantine/isolation facilities as well as the provision of gender-sensitive infrastructure such as segregated toilets and enough light in quarantine and isolation centers. The project will also ensure, via the above noted provisions and stakeholder engagement that quarantine and isolation centers, and screening posts are operated effectively throughout the country, including in remote and border areas, without aggravating potential conflicts between different groups, including host communities and refugees/IDPs.

4.2.15 Labor and Working Conditions

The project will ensure the application of OSH measures will be outlined in the sub-project specific ESMP and ICMWP to be prepared as noted under ESS1 as well as WHO guidelines. This encompasses procedures for entry into healthcare facilities, including minimizing visitors and undergoing strict checks before entering; procedures for protection of workers in relation to infection control precautions; provision of immediate and ongoing training on the procedures to all categories of workers, and post signage in all public spaces mandating hand hygiene and PPE; ensuring adequate supplies of PPE (particularly face mask, gowns, gloves, hand washing soap and sanitizer); and overall ensuring adequate OHS protections in accordance with general EHSGs and industry specific EHSGs and follow evolving international best practice in relation to protection from COVID-19. Also, the project will regularly integrate the latest guidance by WHO as it develops over time and experience acquired addressing COVID-19 globally.

Medical staff at the facilities should be trained and be kept up to date on WHO advice (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>) and recommendations on the specifics of COVID-19.

In line with ESS2 as well as the Kenyan law, forced or conscripted labor is prohibited both for construction and operation of health care facilities. Further, child labor is forbidden in accordance with ESS2 and Kenyan law, i.e. due to the hazardous work situation, for any person under the age of 18 years.

The project will also ensure a basic, responsive GRM to allow workers to quickly inform their immediate management team of labor issues, such as a lack of PPE and unreasonable overtime as well as the national grievance hotline to the MoH. The new contracted workers will be orientated on and sign a code of conduct on expected behavior and safety standards including SEA/GBV risks as outlined in a LMP.

4.2.16 Cultural Heritage and Biodiversity Issues

Based on the screening of potential and known locations for rehabilitation and construction works, likely impact of the project on cultural heritage is low since most of the renovation and construction activities will be carried out within the existing spaces of PoE and health facilities boundary. However, the pre-

construction surveys of any new site such as the PoEs, incineration sites, should identify any cultural heritage resources (superficial/sub-surface) that the project should avoid.

If during the works the contractor finds archaeological sites or archaeological objects or natural goods of geological and paleontological origin, he/she is obliged to immediately disrupt works and notify the necessary authority. A chance find procedure and reporting system is annexed to this report (Annex IV) to be used by the contractors in the event that a cultural feature is encountered.

4.2.17 Fire hazards & oil spillage

Construction and or renovation of the health care facilities, laboratories, PoE, isolation and quarantine areas, waste treatment facility housing is associated with potential hazards like fire from short circuit, oils spillage from the temporal fuel storage site and accidental leaks from equipment, slip fall due to poor housekeeping.

Mitigation Measures

- Update existing HCF Emergency Response Plan and train the contractors on the specific HCF risks and related mitigation measures (including evacuation routes) including Fire and Oil Spillage, and make it available to the project stakeholders.
- Early identification of risks (Job Risk Assessment) and instituting proactive measures to avoid.
- Provision of personal protective equipment (PPE) to health workers.
- Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.
- Provide fire extinguishers to healthcare facilities during their renovation.
- Fire emergency telephone numbers should be displaced in communal areas.
- Undertake fire drills at healthcare facility during the construction period

4.3 Operational Phase

Risks resulting from operational activities in component 4 (medical waste treatment facilities) may lead to environmental and public health impacts, component 3 (quarantine, isolation and treatment centers) for COVID-19 patients and component 6 (availability of safe blood and blood products) will lead to generation of various categories of medical waste which ranges from general infectious waste, pathological waste, chemical waste (laboratory reagents) and sharps. The Project should ensure proper management and disposal of the medical waste generated in the project through implementation of component 4 activities (provision and operationalization of waste treatment facilities) as well as the Implementation of ICWMP (Annex III). All the operational phase environmental social health and safety (ESHS) costs shall be paid by the beneficiary healthcare facility including those costs required for implementation of sub-project specific ESMP and ICWMP. The following are the potential impacts associated with implementation of Kenya COVID-19 Emergency Response Project:

4.3.1 Impact as a result of improper procurement of Medical Supplies and Equipment

The project shall procure:

- a. Equipment such as intensive care equipment (intubation, oxygen concentrators, suction machines, respiratory support machines) and dialysis machine and plant.
- b. Supplies: sample collection and packaging supplies, lab reagents, pharmaceutical supplies, health care waste management/lab PPE among others.

Poor quality equipment may exacerbate COVID19 fatality due to failure of operations especially life saving machines like ventilators. On the other hand, due to poor handling of samples collection and packaging supplies, lab reagents, pharmaceutical supplies, health care waste management the use of lab PPE may lead to the spread of infections to the healthcare workers.

Mitigation measures

- Adhere to the procurement plan for acquisition of all medical supplies and equipment from certified suppliers only.
- Carry out due diligence for all potential suppliers to guarantee quality equipment and products.
- WHO interim guidance on rational use of PPE for corona virus disease 2019 provided further details on the types and quality of PPE that are required for different functions.
- The healthcare workers shall be provided with medical personal protective equipment (PPE) includes: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard), Boots/closed work shoes.

4.3.2 Confrontation between security personnel and the public

In case quarantine and isolation centres are to be protected by armed security personnel or they are involved in enforcement of government directives or containment of possible social unrest.

Mitigation measures

- Security personnel shall follow strict rules of engagement and avoid any escalation of the situation.
- Training and or implementation of strict guidelines for engagement of armed security personnel.
- Monitoring of the behavior of the security personnel over the rules of engagement.
- Community members encouraged to report any concerns through instituted GRM.

4.3.3 Spread of COVID-19 Infections

COVID-19 infections may spread due to: weak compliance with the precaution measures for infection prevention and control in isolation and treatment areas, improper collection, transport, treatment and disposal of infectious waste becomes a vector for the spread of the virus and poor sanitation and improper management of infectious wastes (blood or other body fluids with potential to cause diseases) and waste water related to COVID-19 diagnosis and treatment services,

Mitigation Measures

- Health facilities should establish and apply Standard Precautions including:
 - Hand Hygiene (HH);
 - Respiratory hygiene/cough etiquette.
 - Use of personal protective equipment (PPE);
 - Handling of patient care equipment, and soiled linen;
 - Environmental cleaning;
 - Prevention of needle-stick/sharp injuries;
 - Appropriate Health Care Waste Management;
- Health facilities should establish and apply Transmission based precautions (contact, droplet, and airborne precautions) as well as specific procedures for managing patients in isolation room/unit.
- Establishment of Standard precautions and Transmission based precautions in line with National guidelines for IPC in healthcare facilities and take into account guidance from WHO on COVID19 infection control,

- Collection of samples, transport of samples and testing of the clinical specimens from patients meeting the suspect case definition should be performed in accordance with WHO interim guidance [Laboratory testing for coronavirus disease 2019 \(COVID-19\) in suspected human cases](#).
- Tests should be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) and by staff trained in the relevant technical and safety procedures.
- All hospitals and laboratories should prepare healthcare waste management procedures in accordance with the national requirements that outline waste segregation procedures, on site handling, collection, transport, treatment and disposal, and training of the staff.
- Health facilities shall ensure the provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Health facilities shall establish and apply good practices line with WHO [guidance on water, sanitation and waste management for COVID-19](#) and National guidelines for Infection Prevention and Control in the healthcare facilities.
- Samples that are potentially infectious materials (PIM) need to be handled and stored as described in WHO document [Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses \(PIM Guidance\)](#).

4.3.4 Traffic Hazards

There is high risk associated with traffic and road safety hazard during operational phase due to use of ambulances, transportation of samples to the laboratory and transportation of highly infectious medical waste from facilities with no HCW treatment and disposal facilities.

Mitigation measures

- The relevant staff should be trained on pre-hospital emergency care, infection prevention and control measures, how to handle samples in transit, healthcare waste and spillage management in case of an accident and provided with the required PPE,
- Vehicles used as ambulances or for transporting any hazardous material and medical waste should be road worthy, labelled to indicate its load and its payload secured to minimize risk of accidents and spillage,
- Procure well equipped ambulances; ensure they are outfitted with audible back-up alarms as well as with effective communication system for emergency service functions and activities
- Periodic community awareness on traffic awareness campaign,
- Use of competent drivers with defensive driving technics,
- MoH and the respective project beneficiaries (health facilities, referral laboratories) shall regularly inspect vehicle safety and maintain them accordingly, and
- Ambulance drivers should follow guidance on safe emergency driving,
- Vehicles used in transport of samples or healthcare waste should be easy to clean, free of sharp edges and shall be cleaned thoroughly and disinfected after use.

4.3.5 Managing Blood/ Body fluid Exposure

- i. Persons including HCWs with percutaneous or muco-cutaneous exposure to blood, body fluids, secretions, or excretions from a patient with suspected or confirmed infectious disease, should immediately and safely stop any current tasks, and leave the patient care area.
- ii. Safely take off PPE according to the steps in the procedure, in the anteroom.
- iii. Treat affected exposed area:
 - wash the affected skin surfaces or the percutaneous injury site with soap and water

- Irrigate mucous membranes (e.g. conjunctiva) with copious amounts of water or an eyewash solution, and not with chlorine solutions or other disinfectants.
- iv. Immediately report the incident to the chief of unit, IPC focal point (following hospital exposure procedure) as soon as the HCF staff exit the isolation room/ unit.
- v. Exposed persons should be medically evaluated for:
 - infectious disease (ID) (of isolated patient)
 - other potential exposures (e.g., HIV, HCV) if sharp/needle-stick injury
- vi. Exposed persons must receive follow-up care, including:
 - fever monitoring, twice daily period of recording symptoms will depend on the ID
 - Counselling and psychological support.
- vii. Immediate consultation with an expert in infectious diseases for any exposed person who develops fever, symptoms after exposure.
- viii. If fever appears and other symptoms, isolate HCF staff, and follow procedure for ID suspected until a negative diagnosis is confirmed.
- ix. Workers suspected of having infected should be cared for/isolated, and the same recommendations outlined in this document must be applied until a negative diagnosis is confirmed.
- x. Conduct contact tracing and follow-up of family, friends, co-workers and other patients, who may have been exposed to COVID-19 virus through close contact with the infected HCW/ staff.

4.3.6 Generation of waste water and faecal waste

Isolation and quarantine facilities are associated with increased volume of waste water and excreta. Liquid contaminated waste (e.g. pathological sample, blood, faeces, urine, other body fluids and contaminated fluid) requires special handling, as it may pose an infectious risk to healthcare workers with contact or handle the waste. There is no evidence to date that the COVID-19 virus has been transmitted via sewerage systems with or without waste water treatment. The selected beneficiary facilities will have a well-designed and functional waste water treatment plants to the extent possible; in case the defects are detected, all necessary maintenance issues will be included in the sub-project design and construction phase and impacts as a result of the activities included in sub-project specific ESMFs.

Mitigation Measures

- Assess existing waste water collection, treatment and disposal system, and if not acceptable, then include in the sub-project design and construction all necessary remedial measures,
- Segregation, minimization and safe storage of potential sources of liquid wastes,
- Liquid waste originating from the laboratory should pass through different units for pre-treatment (decontaminate and dilute) before directing to the general sewer line where technically and financially feasible,
- People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine,
- Where this is not possible, patients sharing the same ward should have access to toilets that are not used by patients in other wards,
- Each toilet cubicle should have a door that closes, to separate it from the patient's room,
- Flush toilets should operate properly and have functioning drain traps,
- When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds,

- If it is not possible to provide separate toilets for COVID-19 patients, then the toilets they share with other non-COVID-19 patients should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (impermeable gown, or if not available, an apron, heavy-duty gloves, boots, mask and goggles or a face shield).
- Health-care staff should have toilet facilities that are separate from those used by all patients.

Best practices for protecting the health of sanitation workers should be followed:

- workers should wear appropriate PPE, which includes protective outerwear, heavy-duty gloves, boots, goggles or a face shield, and a mask;
- perform hand hygiene frequently;
- avoid touching their eyes, nose or mouth with unwashed hands, and
- practice social distancing while working.

4.3.7 Risk associated with procurement of Sub-standard PPEs

Procurement of poor quality PPE may exacerbate COVID-19 infection transmission to healthcare workers and cleaners in relation to laboratory procedures, interaction with COVID-19 patients and handling of healthcare waste.

Mitigation measures

- Adhere to the procurement plan for acquisition of all personal protective equipment from certified suppliers only.
- Carry out due diligence for all potential suppliers to guarantee quality supply of personal protective equipment and products.
- Abide by the WHO interim guidance on rational use of PPE for coronavirus disease 2019 over the types and quality of PPE required for different functions.
- The healthcare workers shall be provided with medical personal protective equipment (PPE) includes: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard), Boots/closed work shoes and trained on use

4.3.8 Community Health Risk

Improper waste disposal can cause public health risks due to environmental pollution: impaired air quality from burning of healthcare waste, storm water contamination or when people rummage through raw waste stockpiles. Waste water may not seem to pose considerable disposal challenge since all existing facilities either has on-site septic systems or sewage lagoons. However, this remains a risk in areas where there is no drainage system.

Plume down-wash leads to chronic exposure of nearby communities to potent air pollutants including dioxins. Infections sustained when people or children rummage through improperly dumped infectious waste can be life-threatening.

Unless mitigation recommendations are implemented, this impact will occur at all healthcare facilities. Likelihood of the impact occurring is high if incinerator stack designs are flawed or proper medical waste management practices are not instituted, and if common practices of open air burning of all waste types continue.

Impact management

- Targeted procurement of only required pharmaceutical, equipment, and other medical supplies in small quantities;
- Ensure regular monitoring of solid, liquid waste management practices and waste treatment;

- Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for each facility in accordance with the national healthcare waste management plan;
- To ensure proper sewage management and use of latrines where there is no sewer;
- Ministry of Health shall develop measures for proper management of expired pharmaceutical drugs and instigate this policy at all health care facilities;
- Install appropriate drainage channel within the health facility;
- Facility operators should undertake regular assessment of waste generation quantities and categories to facilitate waste management planning, and investigate opportunities for waste minimization on a continuous basis,
- Separate residual chemicals from containers and remove to proper disposal containers to reduce generation of contaminated waste water;
- All waste disposal sites should be NEMA licensed, secured and out of reach from the scavengers;
- Acquire incinerator(s) that are appropriate to handle healthcare waste with specification including air pollution control option;
- Ensure the healthcare waste generated in the facilities are disinfected, treated and safely disposed of; and
- Community should be sensitized on infection prevention and control measures related to COVID-19.

4.3.9 Occupational Safety and Health Risks

COVID-19 is highly infectious and the risk of contraction by healthcare workers and the general public is high, if requisite training, sensitization and protective gear are not provided. Medical facilities are a potential source of infectious waste and these could pose unsafe conditions for healthcare staff. Of particular concern are health workers handling infectious waste (including sharps) without adequate protective gear, storage of sharps in containers that are not puncture-proof. While some OSH risks will be new borne by equipment or services introduced after renovation or upgrade of facilities, most other effects are existing (hence cumulative) and would only be exacerbated by increased use of healthcare services as a result of COVID-19 cases. Below is a list of OSH risk sources for healthcare staff:

- i Biological hazards (blood or other body fluids with potential to cause diseases);
- ii Lack of adequate lighting in workplaces;
- iii Lack of safe access particularly for disabled employees;
- iv Inadequate ventilation in rooms;
- v Lack of adequate training (or neglect of safety precautions/ guidelines) in use of medical equipment;
- vi Misuse of equipment and materials for functions they are not designed;
- vii Lack of safety signage in specific areas (e.g. X-ray rooms) from radioactive hazards;
- viii Electrical hazard;
- ix Eye hazards such as splashes in laboratories and operating rooms; and
- x Chemical hazards (acids, alkalis, expired drugs, oxidizing and reactive chemicals);

Likelihood of the impact occurring is high unless control measures are instituted. Although it is a cumulative impact, the risk to human health is significant.

Mitigation measures

- Ensure the implementation of standard precautions and transmission based precautions in line with national guidelines for IPC in healthcare facilities taking into account guidance from WHO and/or CDC on COVID19 infection control,
- Update and implement HCF OSH plan and/or emergency response plan,

- Ensure identification of risks (Job Risk Assessment) and instituting proactive measures,
- Train the healthcare workers on the potential OSH risks in relation to COVID-19,
- Provision of adequate and required personal protective equipment (PPE) to health workers and enforce on use. This includes: single use medical mask, gown, Apron, eye protection, boots or closed shoes.
- Provision of a system for disinfection of the multi-use PPE if not available.
- Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.
- Ensure availing of Material Safety Data Sheet for all chemical use in the lab to the lab technicians.
- The beneficiary facilities (labs and HCF) will prepare sub-project specific ICWMP and this will include update of the health facility OSH plan,

4.3.10 Fire risk

Without provisions for fire safety, there is a risk of fire outbreak at healthcare facilities (quarantine, isolation, laboratories) with disastrous life and financial impact. Fires can start from ignitable materials in laboratories, cigarette smoking in non-designated places or old electrical connections.

Mitigation Measures

- Provide fire extinguishers to healthcare facilities during their renovation at strategic positions and ensure servicing is done.
- Key healthcare staff shall have basic training in fire control.
- Fire emergency telephone numbers should be displayed in communal areas.
- Each healthcare facility shall prepare a fire emergency management plan.
- Undertake regular fire drills at healthcare facility, to test on emergency response and use the results to improve on the response mechanism.

NB: Specific site sub-project ESMPs /ICWMP shall update the Emergency Response Plan to adequately address all potential hazards (not just fire) including but not limited to man-made (spills, accidental releases, loss of energy supply) and flood / storm.

4.3.11 Misuse or inability to use installed healthcare systems and equipment

This project would be in vain if healthcare staff have no requisite training and skill to use installed equipment for COVID-19 management.

Mitigation measures

- Provide requisite training during equipment installation.
- Carry out regular supervision, ensure only trained authorized personnel operate equipment,
- The manual containing information on how the medical facilities and equipment should be safely handled should be made available to the relevant staff.
- Equipment's should be sanitized and disinfected before use to minimize risks of infections.

4.3.12 Lack of Sustainability

When improved healthcare facilities and equipment's installed are not continually maintained, they quickly degenerate. This could have significant negative medium-term impacts of local spatial extent which are reversible.

Mitigation measures

- A Facility Maintenance Plan shall be prepared and implemented at each healthcare facility.

- The respective beneficiary County Governments shall ensure there is always a budget to sustain healthcare facilities in the county in a functional state.
- Equipment's available in the health facilities should be serviced and maintained regularly.

4.3.13 Air pollution from on-site medical waste incinerators

Incineration of hospital waste if carried out in inappropriate facilities could result into localized pollution of air with pollutants such as ash, furans and dioxins. Dioxins are known to promote cancers in humans. The Down-wash of incinerator emissions has potential to degrade indoor air quality of healthcare buildings or those of nearby off-site buildings. The impact severity associated with this is that the duration of on-site and off-site air pollution would be long-term lasting entire life on incineration units unless the deficient units are either decommissioned or improved. Considering the gravity of potential air pollution on health of patients and nearby communities, this impact will have high significance.

Mitigation measures

- Consultations with the public shall be done by the design consultant to inform the siting of incinerators before installation,
- Waste segregation at point of origin should be encouraged to minimize mixing of hazardous and non-hazardous waste,
- Engineering design of stacks on-site brick incinerators should follow good international industry practice (GIIP) as outlined in World Bank EHS Guidelines: Air emissions and ambient air quality, April 2007,
- The health care waste management facilities on site should be regularly serviced and maintained, the scrubbers fitted at the incinerators should be periodically replaced,
- Inspection/ monitoring: Healthcare administrators should undertake regular visual inspection of incinerator stack for incidents of down-wash and undertake annual monitoring of emissions/ambient air quality or a general environmental and social audit of entire healthcare facility,
- Training of incinerator operators is important for them to be familiar with basic principles and routine practices. For example, homogenization of waste is crucial to ensure efficient and complete combustion during incineration to avoid generation of dioxins for instance when wet waste batches quench flames and lower combustion temperature below levels at which such pollutants are destroyed.

4.3.14 Improper Medical Waste Management

During their operation, health centres will generate medical waste through several clinical activities including; sample collection from COVID -19 suspected patients, laboratory practices and procedures (performing and handling of specimen and chemicals), blood transfusion procedures and from activities in isolation and quarantine facilities; which need to be disposed of in an appropriate medical waste disposal facility. Improper disposal of medical waste would have environmental and public health impacts: for example, open burning and incineration of medical wastes can result in emission of dioxins, furans and particulate matter, and result in unacceptable cancer risks under medium (two hours per week) or higher usage.

Impact mitigation¹¹

- Health care facilities should establish, operate and maintain a health care waste management plan (HWMP) adequate for the scale and type of activities and identified hazards,

¹¹ IFC Environmental Guidelines for Health Care Facilities, 2007.

- Each healthcare facility should prepare and/or update the healthcare waste management plans consistent with the National regulations, ICWMP and the WBG EHS guideline,
- Waste should be identified and segregated at the point of generation. Non-hazardous waste, such as paper and cardboard, glass, aluminum and plastic, should be collected separately and recycled. Food waste should be segregated and composted. Infectious and / or hazardous wastes should be identified and segregated according to its category using the colour-coded system.
- Prevention and minimization of the production of waste (integrating systems and practices to avoid the creation of waste into facility design and management and equipment and consumables purchasing),
- Reuse or recycling of wastes to the degree feasible, employing:
 - Source reduction measures such as purchasing restrictions to ensure the selection of methods or supplies that are less wasteful or generate less health care waste;
 - Recyclable products (use of materials that may be recycled either on- or off-site);
 - Good management practices rigorously applied to purchase and control of chemicals and pharmaceuticals; and
 - Segregation of wastes into different categories—for control of quantities and disposal methods.
- Seal and replace waste bags and containers when they are approximately three quarters full. Full bags and containers should be replaced immediately,
- Identify and label waste bags and containers properly prior to removal,
- Transport waste to storage areas on designated trolleys / carts, which should be cleaned and disinfected regularly,
- All healthcare waste generated during care of COVID-19 patients should be treated as infectious waste and managed in accordance to WHO guidelines on Water Sanitation, Hygiene and Waste Management for COVID-19,
- Instructions on how to handle the infectious waste from isolation and treatment centers should be made available to the waste handlers in all health facilities,
- Ensure safety and health of the health care waste handlers through provision of appropriate PPEs, vaccination against Hepatitis B and tetanus as well as provision of post-exposure prophylaxis (PEP),
- Waste storage areas should be located within the facility and sized to the quantities of waste generated, with the following design considerations:
 - Hard, impermeable floor with drainage, and designed for cleaning / disinfection with available water supply;
 - Secured by locks with restricted access;
 - Designed for access and regular cleaning by authorized cleaning staff and vehicles;
 - Protected from sun, and inaccessible to animals / rodents;
 - Equipped with appropriate lighting and ventilation;
 - Segregated from food supplies and preparation areas; and
 - Equipped with supplies of protective clothing, and spare bags / containers.
- Unless refrigerated storage is possible, storage times between generation and treatment of waste should not exceed 48 hours during cool season, 24 hours during hot season.
- Store radioactive waste in containers to limit dispersion, and secure behind lead shields.
- Transport waste destined for off-site facilities according to the guidelines for transport of hazardous wastes / dangerous goods in the World Bank General EHS Guidelines and the Waste Management Regulations, 2006,.
- Transport packaging for infectious waste should include an inner, watertight layer of metal or plastic with a leak-proof seal. Outer packaging should be of adequate strength and capacity for the specific type and volume of waste,
- Packaging containers for sharps should be puncture-proof.

- Waste should be labelled appropriately, noting the substance class, packaging symbol (e.g. infectious waste, radioactive waste), waste category, mass / volume, place of origin within hospital, and final destination.
- Transport vehicles should be dedicated to waste and the vehicle compartments carrying waste sealed.
- Facilities receiving hazardous health care waste should have all applicable licences and capacity to handle specific types of healthcare waste.
- Healthcare facilities using off-site waste transportation should ensure proper Environment and Social Due Diligence (ESDD) for potential NEMA registered waste transport and disposal companies, including applicable EHS clauses in service contract, comply with ESS 3 clause 9 (water use), and review of such facilities consistent with ESS2 and OSH aspects for Supply Workers;
- Customized training for the staff handling and management health care wastes contaminated with COVID-19 should include:
 - The use of appropriate / full PPEs (**N95 respirators, apron, heavy duty gloves, eye protection, boots and long sleeved gown**);
 - Hand hygiene practices;
 - Waste segregation strategies and clean up procedures;
 - On-site Handling, Collection, Transport and Storage;
 - Exposure to COVID-19 infections and diseases transmission;
 - Exposure to radiation; and
 - Fire safety measures.

4.3.15 Risks Associated with Sample Collection, Packaging and Laboratory Procedure

It is essential that laboratory analysis is carried out to immediately ascertain or rule out a suspected COVID-19 case. It is expected that COVID-19 samples collected during a suspected outbreak will be transported by Ministry of Health trained staff to a specialized reference laboratory for analysis in accordance with WHO and MoH standard operating procedures. This avoids the potential impact of risks associated with improper collection of samples, transportation of samples, improper laboratory waste disposal in communities or at emergency treatment units. Improper management of laboratory waste (syringes, Gene Expert cartridges etc.) would lead to off-site COVID-19 transmission slowing effective containment of the outbreak. The impact and severity due to unplanned disposal of COVID-19 related laboratory waste would be a negative impact with potentially long-term and irreversible socio-economic impact with high significance.

Mitigation Measures

Ministry of Health shall:

- Ensure that HCWs who collect specimens use appropriate PPE (i.e., eye protection, an N95 mask, a long-sleeved gown, gloves). If the specimen is collected with an aerosol-generating procedure, personnel should wear a particulate respirator at least as protective as a certified N95, an EU standard FFP2, or the equivalent;
- Ensure that all personnel who transport specimens are trained in safe handling practices and spill decontamination procedures;
- Place specimens for transport in leak-proof specimen bags (i.e., secondary containers) that have a separate sealable pocket for the specimen (i.e., a plastic biohazard specimen bag), with the patient's label on the specimen container (i.e., the primary container), and a clearly written laboratory request form;
- Establish a quality control system for packaging, collection and transportation of laboratory samples following the WHO guidelines on laboratory biosafety guidance related to COVID-19;

- Ensure the collection of samples, transport and the testing of clinical specimens from patients meeting the suspect case should be performed in accordance with WHO interim guidance on laboratory testing for coronavirus disease 2019;
- Establish a (mobile) incinerator for destroying Gene Expert cartridges at higher than 1,200 °C
- Put in place innovative and efficient mechanisms to improve transport of COVID-19 samples to reference laboratories in the shortest time possible and following the safety precautions;
- Sample transportation should not expose transporters to risk either during normal handling or in case of an accident.

Impact management

Continue building the capacity of laboratory staff to meet necessary standards, including:

- Ensure proper medical waste management in accordance with existing WHO standard operating procedures (SOPs);
- Daily monitoring of laboratory capacity to ensure they are all able to accommodate the number of samples collected;
- Organizing sample management (collection, storage, packaging and transport) in accordance with WHO guidelines;
- Undertake a risk assessment for each processes involved in sample collection, packaging and transportation and identify appropriate risk control measures; and
- Regularly train the relevant health personnel on COVID-19 diagnosis and sample management,

4.3.16 Improper clinical care, isolation of suspected cases and follow-up of survivors

The aim of clinical care for COVID-19 patients will be to provide high quality, safe care and individualized patient-centred care in a biosecure environment to minimize the risk of spreading this disease to other patients or health workers. Clinical care includes medical, nursing, nutritional, rehabilitation, psychosocial care and early childhood care services, disabled persons, children and women, including pregnant and lactating women. If this undertaking is not planned or carried out with due caution, there is a high risk of transmitting COVID-19 infection to healthcare workers or other people in their families.

The onward infection of medical workers or other people due to improper clinical care, isolation of suspected cases and follow-up of survivors would be a negative impact with long-term and irreversible (if death occurred) socio-economic impact will have high significance.

Mitigation measures

MoH shall:

- Improve biosecurity and harmonize care protocols to avoid risk of infections of medical workers and other people;
- Build triage centres in referral hospitals or in health facilities according to the dynamics of COVID-19 pandemic;
- Set up a management system specific to case management structures under the management of MOH (finance, logistics, administration, etc.); and
- Restructure the survivors' follow-up program by fully integrating it into the clinical care.

4.3.17 Weak Infection Prevention and Control Measures (IPC + WASH)

Infection prevention and control (IPC) measures and water, sanitation and hygiene (WASH) aim to prevent and control nosocomial (originating in a hospital) and community transmission of COVID-19. The absence of effective IPC and WASH measures would curtail efforts to control COVID-19. This reiterates the importance of precautions such as avoiding handshaking, hand washing with soap and water

and use of alcohol-based sanitizers. In addition, burial of COVID-19 victims should be left to specialized healthcare teams. The impact severity in case of the absence or weak COVID-19 infection prevention and control measures would lead to uncontrolled spread of COVID-19, a negative long-term and irreversible (if death occurred) socio-economic impact with high significance.

Mitigation measures

Main activities in the health facilities shall include the following.

- Health facilities should establish and apply standard precaution including hand hygiene, respiratory hygiene, use of PPE, handling of patient care equipment and soiled linen, environmental cleaning and prevention of needle stick and sharp injuries.
- Health facilities shall ensure provision of safe water, sanitation and hygienic conditions in line with WHO guidance on water, sanitation and waste management for COVID-19 and National guidelines for infection prevention and control of health facilities.
- Strengthen training activities of healthcare providers and IPC supervisors on issues related to COVID-19¹² (see Annex VI):
 - ensuring triage, early recognition, and source control (isolating patients with suspected COVID-19);
 - applying standard precautions for all patients;
 - implementing empiric additional precautions (droplet and contact and, whenever applicable, airborne precautions) for suspected cases of COVID-19;
 - implementing administrative controls; and
 - using environmental and engineering controls.
- Implement the IPC package that includes standard operating procedures (SOPs), tools, and rapid diagnostic tests.
- Strengthen the IPC / WASH support system in health facilities based on health facility assessments, training supervision with corrective actions, and the establishment of a quality assurance system in close collaboration with the independent monitoring and evaluation team.
- Evaluate and implement WASH infrastructures (improvement of water and sanitation facilities) and services in health facilities.
- Provide health facilities with IPC / WASH inputs (detergents) as needed and monitor their use;
- Ensure the decontamination of health facilities that have received confirmed COVID-19 cases.
- Ensure implementation of the IPC ring approach around each confirmed case of COVID-19.
- Promote preventive medicine; no pregnant women, staff older than 65 or staff with underlying health conditions, should be working in isolation areas, provision of psychosocial support to medical staff and team and any health care workers reporting COVID-19 symptoms should stop work immediately.

IPC in affected communities

In communities, IPC activities shall be carried out in households and in public places. These include:

- Ensuring access to water and sanitation in schools and public places;
- Ensuring decontamination of households and public places that have had confirmed COVID-19 cases;
- Providing hygiene kits to households, schools and public places;
- Strengthening the monitoring and evaluation system; and
- Training community leaders in COVID-19 prevention

¹² [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)

WHO guidance on key questions and answers concerning water, sanitation and hygiene (WASH) is presented in Annex V.

4.3.18 Stigma

The impact severity in the absence or weak psychosocial support systems would impede effective prevention of stigma attached to COVID-19, a negative but short-term and reversible impact, reducing or ceasing with heightened awareness.

Mitigation measures

- Ensure accurate information on the disease, its spread, symptoms and outcomes is broadly distributed to communities using channels that are accessible.
- Handle all people directly affected by the disease with dignity (those in hospitals, quarantine/isolation centers and the dead).
- Strengthen psychological support for ETCs (for confirmed, suspected, and discharged cases) and assistance with hygiene kits for all discharged and cured patients.
- Support affected households to anticipate management of behavioral problems, which can generate tensions and resistance in the community.

4.3.19 Gender-based violence (GBV) and sexual harassment, exploitation and abuse (SEA/SH)

There is a risk of GBV/~~and SHEA/SH~~ during operational phase in the management of quarantine/isolation centers. If security personnel are deployed to guard isolation/quarantine centers the risk of abuse of women and girls could be high. There is also a risk of GBV/SHEA among co-workers.

Mitigation measures

- Ensure isolation and quarantine centers are protected.
- Limit admission of outsiders into the centers.
- Monitor and report on the behavior of security guards at the centers.
- Training for guard supervisors on prevention of GBV/SEA/SH
- Ensure the people in these facilities understand the GBV/SEA/SH referral pathways.
- Ensure the people at the center have access to the toll free hotline.
- All workers should sign the code of conduct to hold them accountable (see the LMP).

4.3.20 Lack of or inadequate public participation and consultation

Public participation is a legal requirement for any development activity. However, given the emergency nature of this project, this process may not be effectively done. Those at the periphery - rural populations, the urban poor and VMGs/HUTLCs may be discriminated against in this process.

Mitigation measures

- Ensure that measures are put in place to identify and reach the VMGs/HUTLCs and rural populations with project information. Special efforts should be made to reach the deaf and blind with critical information on COVID-19.
- Use communication channels that are accessible to marginal populations including use of community radios, translating information in local languages.
- Identify and equip local leaders with information for further dissemination in their communities through their local structures including churches, mosques, clans, nyumba kumi, etc.

4.3.21 Safe and Dignified Burials (SDBs)

In Kenya many ethnic groups and religions have a common traditional practice for handling bodies, e.g. washing before burial. However, the risk of contracting COVID-19 is high if handling of dead bodies is not done carefully. Therefore, the objective of SDB is to prevent transmission of COVID-19 through safe and dignified burial of confirmed, probable or suspected cases. People whose lives have been claimed by COVID-19 are not buried by their families but by specialized healthcare teams wearing necessary PPE while taking appropriate precautions based on World Health Organization (WHO) guidelines¹³. The MoH developed guidelines to be followed for SDB, some of the measures include a minimum number of family members present during the burial, the burial to be conducted during the day and that the tradition and religious beliefs of the family and the deceased are respected.

There are very strong social and emotional sentiments associated with families being unable to bury their deceased family members or friends, when this role is taken over by healthcare teams. In some cases, violent disagreements have erupted between local communities and health teams about who should bury the deceased persons. Inadequate sensitization about the practice and its importance has in some communities caused consternation about SDB. In some cases, communities have complained about burial teams not respecting the dead during burials.

While social stigma associated with burials is strong in many Kenyan communities, it is even greater if families do not pay last respects to their deceased members. This leaves a long-term negative social impact of high significance on affected families. However, when communities are given prior sensitization about SDB and its importance to public health this social stigma would be lessened.

Mitigation measures

- Ensure local communities are satisfactorily sensitized and are aware of SDB and its importance;
- Adhere to WHO and MoH Safe Burial Protocol (see footnote 13 above); on PPE use to safely handle dead bodies, management of dead bodies and surveillance of staff who handle the dead bodies.
- Train and pre-position an SDB Team in local communities, preferably adopting a member of the local community on this team and involving the family where possible.
- Ensure SDB teams are fully knowledgeable about WHO SDB protocols and associated activities including decontamination and other standard precautions, community involvement and psychosocial support.

4.3.22 Inadequate logistics or their inefficient management

Inefficient logistics would slow COVID-19 emergency response efforts, possibly leading to higher mortality than would otherwise occur. The same impact would arise if required resources were inadequate to suitably contain an outbreak. Commonly, inefficiencies can arise from:

¹³ [WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19](#)

- The mismatch between the volume of leased vehicles at very high overall cost and the volume of work;
- Insufficient number of ambulances, and motorcycles, particularly in the new response areas;
- Lack of information regarding medical stocks or supplies;
- Untimely breaks in the stocks of medical supplies; and
- Absence of Standard Operating Procedures (SOPs) for logistics that govern all response stakeholders, and weak capacity of logisticians.

Managing Emergency response might also entail supply of associated necessities such as food, clothing, beddings and utensils to COVID-19 survivors all of which require efficient management of logistics.

The severity of impact due to inadequate logistics (or inefficient management thereof) would slow response operations, potentially leading to higher than expected COVID-19 mortalities. This would have a negative, irreversible socio-economic impact with a very high impact significance and social cost at local and national levels.

Mitigation measures

- Standardization of inventory management tools and mechanisms;
- Checking needs for medicines, specific inputs and consumables;
- Empowering partners to take over the supply of inputs for the activities for which they are responsible;
- Independent responsibility of each partner for its activities (logistical support: accommodation, means of communication and IT, transport, etc.); and
- Strengthening the package of shared logistics services for efficient response.

4.4 Decommissioning Stage

This section outlines the implementation of the technical activities for the safe decommissioning of COVID-19 health care facilities including triage and screening areas, quarantine (hotels, schools, colleges), isolation and treatment centres with particular reference to the process and the technical aspects, including the physical infrastructure, furnishings, equipment and supplies. The primary responsibility lies with the institutions in charge of the facilities under the supervision of the facility manager and the MoH.

“Decommissioning” is intended as the technical process in which COVID-19 healthcare facilities are assessed, dismantled and/or re-purposed after a proper decontamination phase aiming to prevent possible exposure to contaminated structures, equipment or material. Areas of COVID-19 care facility can also be decommissioned during the operational phase when they are no longer required and/or their physical status is visibly deteriorated. Such areas should be cordoned off to prevent unauthorized re-entry in order to avoid re-contamination. The decommissioning related activities for all the project construction works would be covered by the project specific ESMP and the C-ESMP

4.4.1 Decommissioning process

The decommissioning process has been divided into four phases as illustrated in Figure 4-1. It covers only the physical structures and equipment as all the other related factors of the decommissioning process are outside the scope of this guidance. These phases should be strictly followed to ensure that operations are conducted in a safe manner.

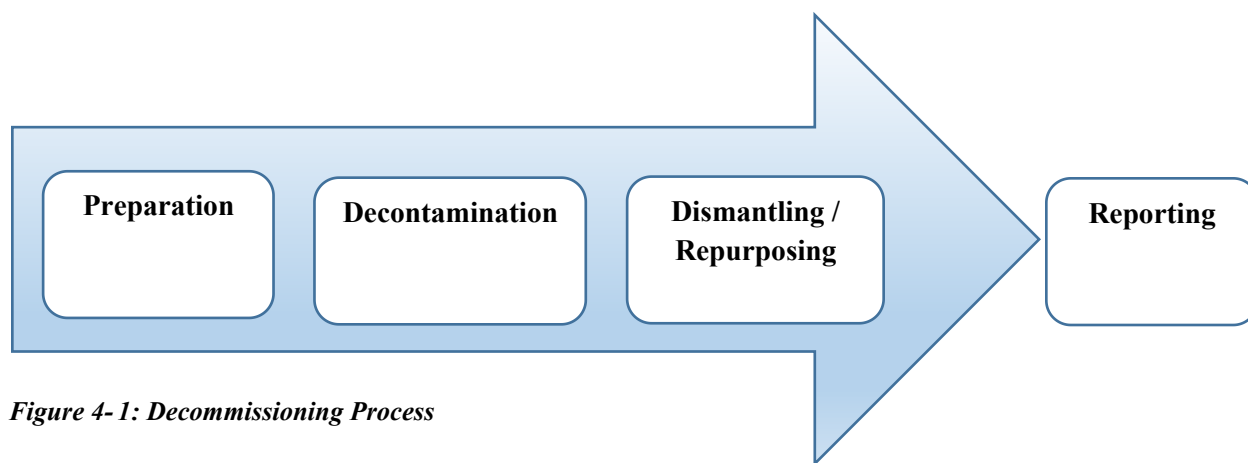


Figure 4-1: Decommissioning Process

Preparation for decommissioning should be undertaken well in advance of the authorization for decontamination to ensure stakeholders’ buy-in. This phase includes the planning of the required pre-and post-decontamination actions as follows:

- Health facility/site manager should issue notice of the intention to decommission the site to relevant departments;
- Access control should be maintained throughout the whole process to guarantee the smooth running of operations, safety of the staff involved and to manage the perception of the process within the local community; and
 - Items (e.g., furniture, beds, tents, equipment, and instruments) should only leave the site at the end of the process and with the permission of the site manager to reduce risk of recontamination.
- The facility manager should brief the decommissioning team. The briefing should focus on infrastructures in place and method of construction, and identification of a “clean zone” for the reception and temporary storage of disinfected material.
- Community engagement should aim to inform, consult, engage and reassure the surrounding community in regards to the decommissioning process.
- Infrastructure assessment refers to the visual inspection for signs of decay or breakdown.
- Logistical activities are divided into supply, inventory (or list) and storage.
 - Supply: all items required to perform all the activities included in the process with particular reference to personal protective equipment (PPE), machine and equipment’s, appropriate disinfectants (including chlorine, alcohols, peroxygen, detergents, iodophors, quaternary ammonium and phenolic compounds) are effective against corona viruses if used at the correct concentration for the appropriate contact time as specified in the manufacturer’s recommendations.
 - Inventory (or list): all equipment should be revised during the preparation phase and agreement made about their future with particular reference to tents, medical equipment, generators, pumping devices and incinerators, based on the regulations and agreements stipulated at the time of opening the facility.

- Storage: refers to the identification and briefing of the team in charge of disassembling the tents and temporary infrastructures. This process includes also identification of the site for temporary storage of the material that can be reused.
- Risk analysis: refers to the revision of the associated hazards in each phase of the process and related mitigating measures already in place and/or to be established.
- Staff requirements: should be based on the size of the facility and time line considered for the completion of the process.
- The team must include a former infection prevention control staff from COVID-19 care facility. This decreases the time spent on retraining staff on the correct implementation of technical areas.
- More than one team can operate at the same time under supervision of their respective team lead/supervisor. However, their assigned area should be identified, marked and reviewed during the preparation phase.
- Training of the team: should comprise the preparation, activities to be undertaken and potential risks involved, emergency response plans, occupational Safety and Health measures and safe use of cleaning and disinfectant solutions and the different types of PPE for use. Tetanus immunization should be offered to the team, if available.

4.4.2 Decontamination

The following precautions shall be undertaken:

- Monitoring of the sectioned areas during the whole decontamination phase;
- Use of tape or rope to demarcate the area during the operation and identify the disinfected areas if the work is conducted in phases; and
- Creation of a dedicated space for the drying of equipment/materials during the cleaning phase.

The IPC officer and/or designee should observe the cleaning and disinfection process as a way to validate that the surfaces have been properly cleaned and disinfected.¹⁴

Table 4-1 highlights the minimum requirements for safety during the decontamination phase. It is classified into three groups: equipment, human resources, personal protective equipment and consumables.

Table 4- 1: Minimum requirements for safety during the decontamination phase

Human Resources	Personal Protective Equipment	Consumables
Project officer	Double gloves (non-sterile examination gloves and heavy duty gloves).	Demarcation tape
IPC officer	A disposable gown or coverall made of fabric that is tested for resistance to penetration by blood or body fluids or to blood borne pathogens to cover clothing and exposed skin.	Disposable plastic waste bag.
Hygienists	A disposable waterproof apron worn over the gown or coverall. If disposable aprons are not available, heavy duty reusable waterproof aprons can be used. If appropriate, cleaning and disinfection is performed.	For other consumables.
Water and sanitation officer	A fluid-resistant medical/surgical mask with a structured design that does not collapse against the mouth (e.g., duckbill, cup shape).	
Occupational Safety and Health officer	Eye protection (either goggles or face shield) in order to have the mucous membranes of the eyes, mouth and nose completely covered by PPE and prevent virus exposure.	
Laundry staff (optional)		
Waste handler		
County Public Health		

¹⁴ World Health Organization. (2020). Cleaning and disinfection of environmental surfaces in the context of COVID-19: interim guidance, 15 May 2020. <https://apps.who.int/iris/handle/10665/332096>

Officer Security guards	Waterproof boots (e.g., rubber/gum boots). If boots are not available, health workers must wear closed shoes (slip-ons without shoelaces and fully covering the dorsum of the foot and ankles) and overshoes.	
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4.4.3 Dismantling / Re-purposing

The dismantling phase refers to the disassembly of temporary infrastructures and the potential reuse and/or recycling of material or its disposal. It should start only after the validation of the proper cleaning and decontamination of the structures by the IPC officer/designee.

Creation of a well demarcated “clean” zone (e.g., fenced with plastic mesh) within the low-risk area where disinfected equipment and materials from the low-risk area can be temporary stored. The size of the area is dependent on the care facility. However, it is generally recommended to consider a large area due to the volume of items to be stored.

The process of dismantling can be conducted in different areas of the facility simultaneously. However, for larger facilities, it is recommended to proceed in phases in order to better monitor the safe implementation of the activities. Tents if not damaged (tent must be intact) and not made of absorbable material can be packed in storage for subsequent reuse. Wooden shelters and fencing built using tarpaulin can be dismantled and burnt due to their likely deteriorated condition. Concrete surfaces requiring break up should be left until the end of the process. This will allow for the safe use of the excavator. If break up of concrete is done manually, precautions should be taken to prevent Safety and Health hazards.

No equipment or material should be abandoned on site without the approval of the relevant regulatory authorities and affected landholders.

In the event that masonry or concrete structures are buried, it is recommended that the responsible agencies provide a site plan to the landowner and also explain to the landowner where the abandoned facilities are located. If buried and decommissioned latrine pits or septic tanks are present, it is recommended to conduct a simple risk assessment including soil type, water table, hydraulic gradient, and time since pit was buried, etc. This will ensure the safety of new installations, including possibly water pipes.

4.4.4 Re-purposing principle

The key technical principles for the re-purposing of COVID-19 care facility are:

- Location and assigned purpose of the structure;
- Quality of the construction and the material used, in particular for temporary structures;
- Evaluation of the water system in terms of water quantity, in particular during the dry season, and water quality (especially for microbial containment); and
- Quality of the construction and functioning of sanitation facilities.

If the permanent structures are to be returned to their original condition, an assessment of the condition of the building should be performed and maintenance activities conducted before the re-opening of the facility. A fresh coat of paint is recommended as a reassuring measure for the community.

4.4.5 Reporting

A final report of the entire decommissioning process should provide records of all activities, final dispositions of waste and recycled products. This should be submitted within 2 weeks of completing the decommissioning process. It should include:

- The completed audit checklist approved by an IPC officer and by the Ministry of Health (MoH) or relevant authority and facility manager;
- Listed material and equipment for reuse and donation;
- Organization and management of occupational Safety and Health during the decommissioning process;
- Site plans, including underground masonry or concrete structures, water points and location of waste disposal areas (burn pits, latrine pits, etc.);
- Waste management process;
- Photo journal;
- Conclusions and recommendations;
- Strategy for after action review;
- The completed audit checklist shall be handed over to the management of the facility hosting the quarantine/isolation center (e.g. school, etc.).

5 Procedures to Address Environment and Social Issues

5.1 The Environmental and Social Screening Process

The sections sets out the procedures (steps 1-6) for identifying, preparing and implementing the project components, environmental and social screening, preparation of required E&S plans, consultation on such plans, review and approval and implementation. The purpose of this screening process is to determine whether the activities are eligible to be financed or part of the exclusion list. The extent of environmental assessments that might be required prior to the commencement of the sub-projects will depend on the outcome of the screening process described below:

5.1.1 Environment and Social Screening Steps

The environmental and social process of screening consists of the following steps:

Step 1: Screening of the Sub-Projects

The objectives of environmental and social screening are: i) determine whether activities are eligible to be financed; ii) to evaluate the environmental, social, occupational safety and health risks associated with the proposed operation; iii) to determine the depth and breadth of Environmental Assessment (EA); and iv) to recommend an appropriate choice of EA instrument(s) suitable for a given project. Criteria for classification include type, location, sensitivity, and scale of the project, as well as the nature and magnitude of its potential environmental and social impacts. The initial screening for the selection of the sub-projects will be conducted based on the exclusion criteria in the ESCP. The following is a negative list of activities that will not be financed under the project and that will be screen out:

- Activities that may cause long-term, permanent and/or irreversible adverse (e.g. loss of major natural habitat) impacts;
- Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases;
- Activities that may have significant adverse social impacts and may give rise to significant social conflicts;
- Activities which would require Free Prior Informed Consent;
- Activities that may affect lands or rights of VMGs or other vulnerable minorities; and
- Activities that may involve permanent resettlement or land acquisition or adverse impacts on cultural heritage.

The PMT Environment and Social specialists will then complete the Environmental and Social Screening Form (see Annex I), to facilitate identification of potential environmental and social impacts, the Environmental and Social standards relevant and assignment of appropriate environmental and social risk rating, and where required recommend the relevant due diligence actions such as preparation of ESIA, ESMP and Stakeholder Engagement Plan (SEP) as required. In addition, each beneficiary health facility or laboratory will be required to prepare its own ICWMP using the guidance provided in Annex III.

Step 2: Assigning of Environmental and Social Risk Rating

Assignment of appropriate environmental and social risk rating to a particular activity will be based on information provided in the environmental and social screening form Annex I that the MoH Environment and social specialist will have administered. According to World Bank Environment and Social Framework (ESF), projects are classified as high risk, substantial risk, moderate risk and low risk project

according to the environmental and social sensitivity of the sub-project. Some of the proposed renovation activities in section 2.8 may be low risk, any major renovation and construction and/or installation of appropriate waste treatment facilities may range from moderate to substantial risk, thus will require Environmental and Social Impact Assessment.

Step 3: Carrying out Environmental and Social Assessment

After analysing data contained in the sub-project environmental and social screening form and having identified the right environmental and social risk rating and hence scope of the environmental assessment required, the MoH Environment and Social specialist will make a recommendation to the MoH as to whether: (a) no Environmental Assessment will be required; (b) implementation of mitigation measures will be required and thus development of sub-project specific summary Project Report (SPR)/ESMP and C-ESMP based upon the generic ESMP provided in Annex II; or (c) a detailed Environmental Social Impact Assessment ESIA (Comprehensive Project Report-CPR) will be carried out.

The preparation of the supplementary environmental assessment instruments ESIA and/or ESMP based on the screening outcome will be done by NEMA licensed Lead Expert hired by MoH. The ESMP prepared will constitute an integral part of the bidding documents for contractors carrying out civil works under the project, in addition some ESHS clauses will be included in the project bid/contract documents. The beneficiary healthcare facilities will prepare site specific ICWMP which will be reviewed by MoH Environment and social specialist and submitted to the Bank for review and clearance.

Step 4: Review and Approval

The prepared Environment and Social Instruments; (environment and social screening forms, ESIA and/or sub-project specific ESMP for civil works will be reviewed by Environmental and Social Specialist at MoH as well as the World Bank Environment and Social specialist; once World Bank has cleared, it will be submitted to NEMA for approval and licensing. The low and medium risk projects shall be submitted to NEMA county office where the proposed project site is located for review. The County Director of Environment (CDE) shall acknowledge receipt of the SPR by issuing an SPR application reference number and an acknowledgement letter. The SPR shall, WITHIN FIVE DAYS, be screened and assessed for completeness and the following Records of Decision (RoD) of the Authority made and communicated in writing to the proponent. The environmental assessments for component 3 and 4 that require comprehensive project report (ESIA) shall be submitted to the World Bank for review and clearance. Thereafter they will be submitted to National NEMA office for review and approval¹⁵.

Step 5: Public Consultations and Disclosure

In carrying out ESIA an evidence of comprehensive public consultation including; duly signed minutes of consultation meetings with project affected persons and key stakeholders, attendance lists and filled questionnaires are required¹⁶. These public consultations will take place during the environmental and social screening process and during validation of the draft ESIA report, with the input from the public consultations will be reflected in the design of the mitigation and monitoring measures.

World Bank requires disclosure of the environmental assessment report both in-country by the client (MoH), in a manner accessible to all project stakeholders, and at World Bank website.

¹⁵ http://www.nema.go.ke/index.php?option=com_content&view=article&id=302&Itemid=458

¹⁶ World Bank requires public consultations to be conducted for all EA type documents prepared under WB-financed projects (World Bank, ESS1, 2017), while NEMA requires public consultations to be conducted for Medium and High Risk projects (NEMA, 2020)

Step 6: Monitoring, Supervision and Reporting

All the activities to be financed under the Kenya COVID-19 Emergency Response Project will follow the World Bank ESF, environment and social standards and the provisions described and agreed in the ESMF, ESCP, SEP and other due diligence reports prepared to ensure proper management of environment, social, safety and health requirements.

Environmental monitoring aims at checking the effectiveness and relevance of the implementation of the proposed mitigation measures. The Environment and Social specialists will be responsible for monitoring the project activities at the national level. The County Public Health Officers at County level will be responsible for project monitoring and supervision and report to the national PMT. During construction, renovation and rehabilitation of the health facilities, the health facility medical superintendent/facility in-charge or head of the lab, Blood Centres and waste treatment facility will be responsible for the supervision of the implementation of mitigation measures by the contractor at the project sites. The ESHS progress reports from selected healthcare facilities, isolation, quarantine, PoE and labs, construction contracts (waste treatment facilities) should be included under HCF reporting), incident reports, accident logs, grievance logs and among others. Any accident or incident shall be reported to the MoH and the World Bank within 24 hours of occurrence. The MoH PMT will be required to submit the project progress and monitoring reports to the World Bank on a quarterly basis.

Monitoring Indicators

The monitoring requirements and indicators will be included in the sub-project specific ESMP for civil works (both the construction and operational phases of the project) and site specific ICWMP during operations of the beneficiary health facilities for assessing environmental and social management of the project including but not limited to: i) Construction management requirements ii) healthcare waste management iii) compliance with Legislations, iv) Environment, Social Health and Safety (ESHS) performance of the project, including but not limited to, stakeholder engagement activities and grievances log. Use of the indicators for environmental and social monitoring will be included in the training and capacity building program. A screening form for COVID-19 emergency operations is provided in ICWMP Annex III.

5.1.2 Social screening Steps

Social screening will be undertaken for each sub-project at the time of project identification and before the sub-project design is finalized to identify the key social risks and outline appropriate mitigation measures. Table 5.1 illustrates the key steps to be followed in ensuring social risks are appropriately managed.

Table 5- 1: Social Screening Checklist

No.	Activity	Rationale
1.	Identify the key social risks	The objectives of social screening are: to assess the social risks associated with a proposed operation; to determine the depth and breadth of social assessment; and to recommend an appropriate mitigation measures. Project screening will be based on a Summery Project Report (SPR) prepared by the MoH.
2.	Assign a social risk	Assignment of appropriate social risk classification to a particular activity will be based on information provided in the environmental and social screening form that the

	classification	MoH Environment and social officers will have administered.
3.	Conduct a social assessment	If the project/sub-project is perceived to have social impacts on a community, a social management plan will be developed including consultations with different stakeholder groups. The MoH will define the ToRs which will be shared with the Bank for approval.
4.	Public consultations and disclosure	Documents, including the ESIA, ESMP, etc. conducted as part of this project will be disclosed by the World Bank on its website and by the MoH as part of public consultation process and prior to commencement of project activities.
5.	Monitoring of the social mitigation plans	<p>Social monitoring will be implemented to monitor the implementation of the mitigation plans. The indicators to be monitored will include:</p> <ul style="list-style-type: none"> - Access to information and services for the VMGs/HULTCs - The progress in the implementation of the SEP - Grievance reporting and resolution

6 Public Consultation and Disclosure

Consistent with the requirements for stakeholder engagement and taking into account COVID-19 related quarantine and lock down measures, this section describes the consultation process and how project-specific information will be disclosed in relation to this ESMF and each individual sub-project. Consistent with the SEP (see Section 7 below), this section describes how to achieve communication between the PMT and the affected communities and stakeholders. Reference should be made to the Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings.

The project will establish a structured approach to engagement with stakeholders that is based upon meaningful consultation and disclosure of appropriate information, considering the specific challenges associated with COVID-19. In instances where there is a likelihood of more vulnerable groups in attendance, such as older persons and those with compromised immune systems or related pre-existing conditions, stakeholder engagement should minimize close contact. People affected by project activities will be provided with accessible and inclusive means to raise concerns and grievances. This will be through the national grievance toll free hotline that is being set up under the CERC and through county grievance systems that will be strengthened as part of this project. The hotline will receive complaints from the general public, workers and contract workers including confidential complaints including GBV. A COVID-19 complaints protocol will be developed on which all staff and complaints handlers will be trained.

The government has developed a draft National RCCE strategy based on the WHO guidelines. The project will support this and ensure that its implementation includes VMGs and feedback mechanism. The prepared SEP describes the framework for these activities. The SEP will be updated and re-disclosed after the finalization of the national strategy.

The approaches taken will thereby ensure that information is meaningful, timely, and accessible to all affected stakeholders, including VMGs/HUTLC communities and usage of different languages, appropriate communication e.g. FM radios for heard to reach communities, addressing cultural sensitivities, as well as challenges deriving from illiteracy or disabilities. Due to the expected country-wide implementation of activities, the differences of areas and socio-economic groups will equally be taken into consideration during roll-out of the RCCE.

It will be important that care management in quarantine and isolation centres is managed systematically, allowing patients to access information as well as patients' relatives to get necessary information about the quarantined; if feasible by enabling two-way-communication including in local languages where necessary.

Stakeholder engagement will also be critical in component 6: Ensuring availability of safe blood and blood products for transfusion services to ensure trust in services by health professionals, patients and their relatives. For Component 6 activities the Kenya National Blood Transfusion Service, complaints will be dealt with by the health facility and Ministry of Health grievance mechanisms and the legal complaints mechanism including the Ombudsman/Commission of Administrative Justice (CAJ).

The project will conduct continuous behavior assessment and community sensitization through mobile feedback (text messages, social media platforms) and dedicated radio call-in shows both mainstream and vernacular [(Mobile SMS 30M subscribers * 0.5 per SMS *52 weeks) + Radio coverage nationwide for a year 70-120M];

Preliminary consultation was undertaken on 18th June 2020, detailed consultation minutes has been appended as Annex VII. A stakeholder consultation matrix is represented on Table 6-1:

Table 6- 1: A Stakeholder Consultation Matrix

# NAME	DESIGNATION / INSTITUTION	COMMENTS / OBSERVATION	RESPONSE / REMARKS
1. Winfred Mutindi-	National Gender & Equality Commission	<p>The ESMF document has addressed a number of environment and health risks in detail but social and gender issues not articulated clearly. However, even with the environment and health issues, some elements of social and gender should be highlighted.</p> <p>Currently GBV is rampant, there are many early pregnancies been registered due to the COVID 19 closure of schools,</p> <p>The behavioral change associated with COVID 19 may have impact in future, for example no shaking of hands, make people feel loneliness as there is no social touch, there is need to appreciate the cultural aspects within the benefiting / host communities,</p> <p>DOSHS is impressed with human aspects in the project, many project have been catering for the environment issues mainly and leave out social related issues. The concept of using GRM mechanism to get community feedback to the project,</p> <p>There is need to consider having a project committee which involve members of the community taking into consideration gender, age, disability considerations, also for children issues, i.e the community always has the best interest of the children.</p> <p>There is need to have a robust Gender based Violence and Sexual exploitation and Abuse Action Plan to handle the GBV/SEA risks in relation to employment of women and work related sexual harassment,</p> <p>Can the project be extended to the prison, the status of health care services within the prison is wanting? This project can be used to improve service provision in the prison.</p>	<p>Social instruments including SEP and LMP have been prepared for the project.</p> <p>The project has prepared GBV/SEA Action plan that will be implemented during project implementation,</p> <p>GRM procedure has been prepared and it will be used during project implementation,</p> <p>The project has prepared GBV/SEA Action plan that will be implemented during project implementation.</p> <p>Already the project is being implemented in the prison through carrying out tests, capacity building of the wardens,</p>

# NAME	DESIGNATION / INSTITUTION	COMMENTS / OBSERVATION	RESPONSE / REMARKS
1. Dr. Yaron Wolman	Chairperson- Development Partners for Health in Kenya	<p>There is need to re-look critically onto the policy and project on how they impact of the environment and propose adequate mitigation measures.</p> <p>Special appreciation for the World Bank for funding this project timely to respond to the COVID-19 pandemic, this was timely in supporting the health care facilities in the procurement of specialized medical equipment for the laboratories, blood service centers, isolation, quarantine areas and hospital including the provision of personal protective equipment.</p> <p>There is need to evaluate the social implication of the current crisis from the early stages of the COVID-19 pandemic, for example Ebola had a very great impact of social cohesion ties for the communities. This will ensure that communities, healthcare workers and biodiversity are not affected during project implementation.</p> <p>There is a need for the robust monitoring measures to mitigate the residual impact that persist even after implementation of initial mitigation measures,</p> <p>The DPHK would like to stand in solidarity with the Government of Kenya and the people of Kenya in the handling of the COVID-19 pandemic,</p>	<p>ESMF has been prepared to identify the potential environment and social risks and impacts in preparation of the project implementation. Site specific ESMPs shall be conducted for component 3 and 4 to mitigate all risks and impacts ,</p>
2. Isaac Simiyu	National Council For People with Disabilities	<p>Persons with Disabilities needs in relation to Environment and Social Aspect has been completely been left out. Even under the Legislative Policy and Legal Framework, Persons with Disability Act No. 14 of 2003 has been left out. Since Accessibility to Enrolment, Information, Service Provision and Employment is a key requirement, it's my humble request that we deliberately provide for Persons with Disabilities as a Cross Cutting Requirement across the entire</p>	<p>Relevant legislation are reflected in the ESMF.</p>

# NAME	DESIGNATION / INSTITUTION	COMMENTS / OBSERVATION	RESPONSE / REMARKS
		<p>programme.</p> <p>The main-streaming of PWD component should be done in all levels of government including National level, failure to mainstream at the National Level will be replicated at the lower levels as well.</p> <p>The project should ensure inclusion of PWD not only accessing the constructed and renovated healthcare facilities RAM, PWD should access services i.e. sanitary facilities and employment as well.</p>	Measures to support the persons with disabilities have been indicated in the ESMF
3. Maureen Mwadime	Kenya Human Rights Commission	<p>The component of decommissioning the quarantine facilities (especially schools) is a welcome component so that community using the school (pupils, students, teachers and service providers) have confidence that the facilities are decontaminated well. The decommissioning checklist should be made assessable to the community members and any other interested parties.</p> <p>The project should use multi-stakeholder GRM for example at national, county and ward levels. This will enable timely resolution of the disputes before being escalated to the higher levels as well offer adequate time for project implementation.</p> <p>There are a number of action plans developed for the project, there should be a deliberate action plan targeting working with specific entities like Gender and equality Commission, Ministry of Water and Sanitation, Kenya National Human Rights Commission among others,</p> <p>There is need to have a targeted inclusive in the framework with focus on the marginalized groups as well as how to engage the vulnerable communities including the youth, women and PWD. This is due to the</p>	<p>Ministry of Education will work in close collaboration with MoH to ensure decontamination is carried out prior to opening of schools the relevant school management will be involved in the audits of the facilities used.</p> <p>GRM procedure has been prepared and it will be used during project implementation,</p> <p>The project has prepared GBV/SEA Action plan that will be implemented during project implementation.</p> <p>Marginalized people in the community are targeted in project implementation,</p>

# NAME	DESIGNATION / INSTITUTION	COMMENTS / OBSERVATION	RESPONSE / REMARKS
		<p>norm that always men are involved in project implementation than women,</p> <p>There is also a need to involve the host community in terms of how can they participates and be part and parcel of the project,</p>	
4. Aron Orinda	County Public Health Officer for Migori County	<p>There is a need for the project to use the existing structure within the Ministry of Health especially at community levels; this will leverage the existing platform save resources as well as ensure maximum output from the project,</p> <p>There is need to ensure all isolation and quarantine facilities are cleaned and decontaminated to minimize the stigma associated with such facility</p>	<p>The project will use the existing structure within the Ministry of Health/counties to implement the project; monitoring of the project activities at the counties will be the responsibility of the designated county public health officers</p> <p>The ESMF has provided guidance on what required during the decommissioning of the facilities and the activity will involve the relevant stakeholders</p>

7 Stakeholder Engagement

A Stakeholder Engagement Plan has been prepared and publicly disclosed. The plan has been prepared using the guidance by the World Bank. It has identified the key stakeholders for the project and their needs. It has included an elaborate communication plan which is aimed at ensuring that the stakeholders are consulted and have access to information on a regular basis. It has also defined the community hierarchy with the highest point in the health system being the PS.

For the purposes of effective and tailored engagement, stakeholders of the proposed project(s) can be divided into the following core categories:

- a. **Affected Parties:** persons, groups and other entities within the Project Area of Influence (PAI) that are directly influenced (actually or potentially) by the project and/or have been identified as most susceptible to change associated with the project, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures;
- b. **Other Interested Parties:** individuals/groups/entities that may not experience direct impacts from the Project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way; and
- c. **Vulnerable Groups:** persons who may be disproportionately impacted or further disadvantaged by the project as compared with any other groups due to their vulnerable status and that may require special engagement efforts to ensure their equal representation in the consultation and decision-making process associated with the project.

Stakeholders will be kept informed as the project develops and evolves, including reporting on project environmental and social performance and the implementation of the SEP and grievance redress mechanisms (GRM). This will be important for the wider public, but equally and even more so, for suspected and/or identified COVID-19 cases as well as their relatives. **Table 7-1** presents the key milestones to be achieved by the project as part of this SEP. It is notable that the responsibility for execution will lie solely with the MoH.

Table 7- 1: Milestones for the SEP				
Sub-Project stage	Topic of consultation / message	Method used	Target stakeholders	Responsibilities
After appraisal	Risk communication and community engagement strategy	Key informant discussions and FGDs	Communication expert, Media experts and information users including VMGs	MoH communication expert and social safeguards officer
Implementation	Complaints about service provision	County focal point logs and reports and national hotline	Receivers of information and services. Information or Data managers	MoH PMT
Quarterly evaluation and feedback survey	Feedback of effectiveness of different channels of communication	Survey and Direct observation of the project subjects	Different stakeholders and VMG groups	MoH Communications

The GRM

A well-designed and implemented complaints handling mechanism significantly enhances operational efficiency in a variety of ways, including generating public awareness about the project and its objectives; deterring fraud and corruption; mitigating risks; providing project staff with practical suggestions/feedback that allow them to be more accountable, transparent, and responsive to beneficiaries; assessing the effectiveness of internal organizational processes; and increasing stakeholder involvement in the project. An effective GRM can help catch problems before they become more serious or widespread, thereby preserving the project funds and reputation¹⁷. Specifically, the GRM:

- a. Provides affected people with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of a project;
- b. Ensures that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
- c. Avoids the need to resort to judicial proceedings.

For this project, multiple channels will be availed to the public for channeling complaints on the project, including:

- a. telephone and texts (a dedicated line will be purchased for this purpose);
- b. in person visits to the MoH offices, health facilities across the country, and county offices etc.;
- c. letter writing to the Ministry's postal office box;
- d. email – a dedicated email address will be shared for public use;
- e. blog – to be developed and dedicated to the project; and
- f. a toll free 24-hour hotline.

The MoH will acquire a 24-hour toll free hotline which will be established as part of the Transforming Health Systems Project Contingency Emergency Response Component (CERC). The hotline will be staffed with trained grievance handlers (the number of handlers will be increased depending on demand) who speak Kiswahili, English and if possible other languages from those communities that may have limited Kiswahili knowledge. Efforts will be made to seek handlers who are empathetic and can communicate to vulnerable people as well as those in hard to reach counties. A protocol for handling complaints, including staff complaints and confidential information e.g. GBV/SEA/SH complaints will be developed and disseminated.

County specific issues will be handled by the County Grievance Office and MoH grievance focal points. These will also be trained on the GRM protocol, initially in the 14 high risk counties (the 1st phase of the project¹⁸) and then nationally. They will submit the log of complaints and resolution to the national complaints coordinator once a month and refer any urgent complaints immediately. The health facility grievance focal points will be strengthened for facilities receiving and treating COVID-19 patients.

The GRM will include the following steps:

- a. Provide directly affected people (those infected and/or in quarantine) with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of the project;
- b. Ensure those providing services (healthcare workers, uniformed services providers, ambulance workers, etc.) can lodge complaints securely and confidentially;

¹⁷ Adapted from:

<http://documents.worldbank.org/curated/en/342911468337294460/pdf/639100v10BRI0F00Box0361531B0PUBLIC0.pdf>

¹⁸It is notable that the patterns of the COVID-19 infection may influence a shift in the list of priority counties. For instance, although Mandera County was not in the original list, it is now a hotspot that requires support.

- c. Ensure that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
- d. Avoid the need to resort to judicial proceedings, unless the complainant decides that the process provided has failed.

8 Institutional Arrangements, Responsibility and Capacity Building

This section describes the institutional arrangements to implement the ESMF including the screening of sub-projects for environmental and social risks and impacts, preparation and consultation in relation to the assessment and identification of mitigation measures for sub-projects, review, clearance and disclosure of documentation and instruments, and monitoring the implementation of the ESMP. A clear delineation of responsibilities has been spelled out as well.

Note that in the planning, design, and construction stage, MoH will provide specific guidance to the respective HCF, consultants, contractors and Public works engineer over the World Bank guidance note on COVID-19 Considerations in Construction/Civil Works Projects.

The MoH is the main implementing agency for the Project and has designated Environment and social specialists as part of the team to oversee the implementation of the project activities and ensure compliance with environmental assessment instruments (including ESMF) and World Bank ESF requirements.

The ESMF will be disseminated and implemented by the PMT with support from the Directorate of Public Health (Laboratory and Environmental Health Departments), KNBTS and the Counties (healthcare facilities, quarantine, isolation and treatment centres) implementing components of this project.

At the National level institutional responsibility for implementation of safeguard instruments will rest with the PMT. The PMT has environment and social safeguards officer who will support the project implementation and monitoring of project activities as well as adherence to the environment and social due diligence requirements. At County level (PoE, healthcare facilities at level IV & level V, quarantine, isolation and treatment centers, laboratories as well as the blood services, the PMT environmental specialists will collaborate with the County Public Health Officer designated to the project and respective national level functions at KNBTS, will take lead in ensuring implementation and monitoring of the project activities.

Capacity on the content and application of the ESMF will be built at all levels and be applied to all counties, national referral facilities and referral laboratories including those under KNBTS targeted by the Project. The respective project beneficiary facilities will be required to prepare site specific ICWMP and will be responsible for day to day supervision on implementation of the mitigation measures

Monitoring and reporting of activities by the PMT will be continuous to ensure adherence to set specifications and safety to people and the environment. The Bank will provide project implementation support and would base environmental supervision on the Environment and Social Commitment Plan and other safeguard instruments developed to support the environment and social due diligence for activities financed under the project.

There would also be external monitoring of project activities by other relevant government ministries such as National Environment Management Authority or its designate officers at the Counties, County Department of Water and Environment and Directorate of Occupational Safety and Health (DOSHS) as required.

The following institutional arrangement will be used in the implementation of the project:

8.1 The National Emergency Response Committee

The National Emergency Response Committee (NERC) on COVID-19, chaired by the Cabinet Secretary for Health will provide stewardship and oversight of the project. The NERC was established by the

President through an executive order to address various aspects related to COVID-19 preparedness and response including: (i) coordinate Kenya's preparedness and response to COVID-19; (ii) coordinate capacity building of medical personnel and other professionals; (iii) enhance surveillance at all points of entry; (iv) coordinate the preparation of national, county and private isolation and treatment facilities; (v) coordinate the supply of testing kits, critical medical supplies and equipment; (vi) conduct economic Impact Assessments and develop mitigation strategies; (vii) coordinate both local and international technical, financial and human resources support efforts with development partners and key stakeholders; and (viii) formulate, enforce and review of processes and requirements which require entry into Kenya of people travelling from COVID-19 affected countries, among others.

8.2 The National COVID-19 Task Force

The National COVID-19 Task force will provide technical guidance throughout the implementation process. The task force draws membership drawn from the MoH, other relevant Government agencies, development partners, Non-governmental organizations and civil society organizations. The mandate of the task force is to review the evolving threat from the COVID-19 outbreak and regularly offer technical advice to the MoH and other line ministries on appropriate measures. The task force has 5 technical working groups responsible for: coordination; surveillance and laboratory; case management and infection prevention and control; and risk communication and logistics.

8.3 Project Management Team

Project management will be the responsibility of Project Management Team (PMT) established specifically for this project. The PMT will be located in the Division of Health Security, and will report directly to the Principal Secretary, MoH. It will be responsible for coordinating the day to day implementation of activities to ensure timely implementation of the Project at National and County levels. It will work closely with the PMT for ongoing Transforming Health Systems for Universal Care Project (THSUCP). Key staff Environment Specialist and Social Specialist have been recruited to coordinate environment and social compliance of the national legislation, ESMF, the ESCP ESS and other legal agreements of the project.

8.4 Monitoring Roles & Responsibilities during Planning, Design, Construction and Operational Phase

8.4.1 Ministry of Health

At National Level, MoH has hired Environment and Social safeguards specialists as part of the project management team who will take lead in guiding and implementing environmental requirements of the project, working in close collaboration with the respective County Governments (designated county public health officers) will be the key personnel responsible for monitoring the respective environmental and social impacts of the project. There will be a Public health works engineer to monitor the construction phase and will work closely with the project Environment and Social Specialists as well as the designated public health officers. As earlier indicated, MoH Environmental Officers has the requisite training and expertise to undertake necessary monitoring. However, their technical capacity will be enhanced by induction training at the beginning of project implementation to appreciate the new Environment and Social Framework. This will facilitate a better understanding and appreciation of safeguard requirements through discussion of modalities for implementation of the project ESMF provisions. Financial facilitation would however be necessary for their effective participation. The specific roles and responsibilities of the MoH Environment and Social Experts are as follows:

- i) Oversee the production/updating of the ESMF, update the SEP and LMP and project specific ESMPs, ICWMP, C-ESMPs) and other instruments

- ii) Ensure the implementation of the instruments and the Environmental and Social Commitment Plan (ESCP).
- iii) Undertake overall coordination and oversight for all the Environmental and Social safeguards activities;
- iv) oversee the implementation of provisions of the Contractor's ESMP through the Public health works Engineer;
- v) MoH E&S specialist will review the ESMP/ICWMP and submit to WB for review and clearance,
- vi) Take overall responsibility of ensuring that the mitigation measures proposed in the Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP), Environmental and Social Commitment Plan (ESCP) are implemented by the contractor and other applicable entities (e.g., HCF, laboratories, blood services, medical waste disposal facilities, etc.).
- vii) Ensure that environment and social risks and impacts related to the project are monitored and mitigated including: (i) management of highly infectious medical waste ii) threats to human security through the escalation of personal or communal conflict, crime or violence; (iii) risks that project impacts fall disproportionately on individuals and groups who, because of their particular circumstances, may be disadvantaged or vulnerable; (iv) any prejudice or discrimination toward individuals or groups in providing access to development resources and project benefits, particularly in the case of those who may be disadvantaged or vulnerable; (v) impacts on the health, safety and well-being of workers and project-affected communities and other risks as outlined in the World Bank's Environmental and Social Framework;
- viii) Ensure inclusive and genuine stakeholder engagement and feedback mechanism, including a functional grievance redress mechanism for the project both at national and county level.
- ix) Work closely with other consultants/officers involved in design of waste disposal facilities (options) under Component 4 to ensure synergies in approach.
- x) Ensure the functioning of the GRM and follow-up on all social issues as reported on the GRM and/or as gleaned from other sources including the media.
- xi) Monitoring of management of hazardous materials, management and disposal of both solid and liquid wastes: treatment of the waste at respective sites, in addition to the disposal of both hazardous and non-hazardous wastes.
- xii) Provide monthly reports for the Government and quarterly reports on environment and social safeguards implementation to the World Bank.

8.4.2 Public Works Engineers

PMT will work with the Public works engineers who will be responsible for the designs and general compliance of engineering and construction works in relation to the renovation of component 3 and 4 with the respective activities in section 2.8 and 2.9. The engineers will work closely with the project environment and social specialists and the county public health officers to oversee the civil work activities as well as on construction and installation of the waste treatment facilities. He will be responsible in preparation of project progress reports on civil works for sharing with MoH and the Bank on a quarterly basis.

8.4.3 Contractors for Civil Works

- i. The contractors for construction of either component 3 and 4 activities will be responsible for planning, implementation and reporting on implementation of mitigation measures during the execution of civil works. The contractor will also be required to apply standard quality assurance procedures in full compliance with the approved project specific ESMP;

- ii. It is recommended that the Contractor shall have in his team a full time Environmental and Social safeguards specialist for the day to day guidance of the project on matters of environmental and social compliance;
- iii. Construction supervision will include monitoring of, and reporting on, environmental and social aspects, on a daily basis. In this regards, the contractor is required to have in place an Environmental and Management System (EMS);
- iv. The contractor is required to develop a Contractor's Environmental and Social Management Plan (C-ESMP) that was to include the following:
 - a) Occupational Safety and Health Plan;
 - b) HIV/ AIDS management Plan;
 - c) Waste Management Plan;
 - d) Gender Management Plan;
 - e) Labour management Plan;
 - f) Emergency Response Plan and others.
- v. The contractor will be responsible for the relevant training of staff and ensuring that they are fully qualified, sufficiently experienced and certified in accordance with contractual requirements for the work contracted to undertake;
- vi. The project's Monthly Progress Reports shall contain a section referring to environmental and social matters, which summarizes the results of site monitoring, remedial actions, which had been initiated from the previous months, and whether or not resultant action is having the desired outcome. The report will also identify any unforeseen environmental and social related challenges and will recommend a suitable additional actions;
- vii. Promptly notify the MoH (and other relevant parties, such as Public Health works Engineer) and World Bank of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers. Major issues (fatal accidents, injuries) will be provided to the Bank within 24 hours of occurrence. Provide sufficient detail regarding the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and supervising entity, as appropriate. Subsequently, as per the MoH request, prepare a report on the incident or accident and propose any measures to prevent its recurrence.
- viii. Progress site meetings with the contractor will also include a review of environment and social safeguards and a section will be presented on the progress of implementation of safeguards in the monthly site meetings;
- ix. The Contractor's Environment and Social Safeguards specialists or Community Liaison Officer shall also be in constant engagement with local leaders and community, and also ensure that any arising environment and social grievances are addressed; and
- x. Ensure contractor's environmental and social monitoring report will be prepared on a monthly basis over the construction period. Detailed monthly monitoring reports with clear illustrations of implementation of mitigation measures shall be compiled by the contractor under the supervision of the R.E. These detailed reports with evidence of compliance will be prepared and appended to summary monthly site meeting reports.

Other entities responsible for operating project related aspects:

8.4.4 Head of Healthcare facilities

Head of Hospital (Medical superintendents /Facility in-charge/ Healthcare Administrator) do supervise the everyday operations of healthcare facilities. They focus on improving the quality of patient care by ensuring the facilities are well-staffed, finance well-managed and general management of the facility. Some of the specific roles under the project include:

- Provide supervision and guidance to the contractors on site at the HCF during construction phase,
- Train contractors on HCF emergency response plan (risks and escape routes in case of emergency)
- Play advisory role in selection of healthcare waste facilities to be installed,
- Coordinate the supervisory role of the public works engineer and the county public health officer,
- Reporting to the PMT on project related progress, challenges, incidents and accidents at the health facility,
- Ensure adequate training for staff and designate the staff responsible for coordinating and implementing training courses on OSH, IPC, Healthcare waste management and emergency response procedures,
- Establish a team to oversee the preparation and implementation of specific HCF ICWMP and monitor its implementation.

8.4.5 Laboratory Manager

The laboratory manager is responsible for ensuring appropriate laboratory techniques, safety procedures, and hazards associated with handling biohazards and associated wastes are appropriately implemented. Responsibilities of the Laboratory Manager in regard to health care waste include:

- Accept direct responsibility for the health and safety of those working with bio-hazardous materials and/or select agents and toxins associated with COVID 19,
- Adhere to approved emergency plans for handling accidental spills and personnel contamination,
- Tracking and maintaining records of wastes generated from laboratory.
- Ensure compliance by laboratory personnel with relevant regulations, guidelines, and policies,
- Ensure all appropriate personal protective equipment is provided and used. Ensure proper training, including refresher training, and instruction for laboratory personnel in safe practices and protocols, including, at a minimum, training in aseptic techniques and characteristics of the material(s) used.
- Ensuring that individuals working in the facility are experienced and proficient in handling the biological agents at the appropriate level of containment.
- Ensure compliance by waste handler, waste-water treatment and healthcare waste personnel with relevant regulations, guidelines, and policies of infection control and waste management.
- Ensuring that all the relevant staff including; waste handler, waste water treatment plant and incinerator personnel are adequately trained in waste management and risk management in waste water treatment plant and incinerator facility respectively.

8.4.6 Kenya National Blood Transfusion Services

The director of the KNBTS will work closely with the PMT to ensure the project objectives are attained in all the blood services centres under the project. The Director will be responsible to undertake due diligence in the procurement of blood services equipment and ensure proper maintenance for sustainability purpose. In addition, He/she will ensure proper management of medical waste generated as a result of project activities.

8.4.7 Other COVID-19 Healthcare Service Providers

When a hotel, institution, stadium, PoE is selected as a quarantine area for COVID -19 cases, the in charge of the facility becomes the manager to ensure compliance with health and safety legislation and

licensing laws. At the same time the facility is assigned a qualified medical doctor who will be monitoring of the implementation of the infection preventive measures for the people in the quarantine centres. He/she takes the overall responsibility, leads an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices at the facility including but not limited to:

- Follow and implement waste management policies;
- Provide on-the-job training for new staff with regard to ICWMP; and
- Ensure sound treatment and disposal of waste generated in the facility.

8.5 External Supervision and Support Implementation

8.5.1 National Environment Management Authority

The responsibility of the NEMA is to exercise general supervision and co-ordination over all matters relating to the environment and to be the principle instrument of government in the implementation of policies relating to the environment. NEMA will provide approvals of sub-projects and ESIA licenses to all the sub-projects based on the environmental assessment reports submitted. NEMA will also undertake periodic monitoring of the sub-projects by making regular site inspection visits to determine compliance of sub-projects with the ESIA/ESMPs approved and will further rely on the submitted annual audit reports submitted for each sub-project annually as required by EMCA as a way of monitoring. All monitoring reports as well as annual environmental audit report will be submitted to NEMA as specified by the environmental assessment and audit regulations, 2003.

8.5.2 World Bank

World Bank implementation support mission shall be periodically done to ascertain the level of implementation in line with the Environment and Social Commitment Plan and other environment and social instruments prepared for the project namely: ESMF, LMP and SEP.

8.6 Capacity Building and Training

The capacity to manage risks associated with COVID-19 is a monumental challenge as the healthcare professionals may not have the detailed know-how on the infectious risk management in the laboratories to be used for COVID-19 diagnostic testing, quarantine and isolation centers and health facilities, in particular on waste management. Given that Kenya has limited experience in managing highly infectious medical wastes such as COVID-19, the Project was assessed to have a high environmental risk and will require that appropriate precautionary measures are planned and implemented. The project requires a strong Infection control and waste management system including Environment, Social, Health and Safety (EHS) monitoring and inspection capacity that will ensure implementation of ESMP, ICWMP, SEP and LMP. Additionally, the communication process with the public or in handling social concerns around COVID-19 as well as related measures, including quarantine and safe management of dead bodies. The project will provide considerable funding, training and capacity building to support these critical initiatives and build upon international expertise to achieve international best practices on these matters in line with WHO guidelines.

The training in the areas of: Infection prevention and control measures for COVID-19, hand and respiratory hygiene and the use of appropriate PPE, laboratory safety (laboratory technicians), workers

and community safety and health, MSDS, Healthcare waste handling and management, as well as in environmental and social monitoring. Implementation Support monitoring will be provided to relevant staff to enhance their skills in handling emerging challenges of COVID-19 pandemic. The budget for technical support and capacity building training will be **200,000.00 USD** (this is a baseline budget, with availability of supplemental budget support for additional training based on needs assessment to be done during implementation). The Training Plan for staff and support staff is detailed on **Table 8-1**.

Table 8-1: Initial Trainings Plan and Budget for Staff and Support Staff

Capacity Needs / Training areas	Target Participants	Cost (USD)
Infection prevention and control measures for COVID-19, Hand and respiratory hygiene & use of PPE,	<ul style="list-style-type: none"> Professionals working in in Laboratory, HCF. Isolation and Centre, PoE, Consultant & Contractor staff., Blood Services Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment facility operators 	15,000
Training on infection control and waste management measures & the roles and responsibilities for all actors from cradle to Grave	<ul style="list-style-type: none"> Professionals and nonprofessional staff working in the HCF (hospitals, PoE, isolation and quarantine areas and in the Laboratory, Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment facility operators 	15,000
Training on the Environment and Social Framework	<ul style="list-style-type: none"> MoH E& S Experts, procurement officer and other technical support team in the Project Management Team and selected NEMA personnel 	10,000
Training in community health and safety practices	<ul style="list-style-type: none"> Professionals working in in Laboratory, Blood Services, HCF. Isolation and Centre, Consultant & Contractor staff. Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment facility operators 	10,000
Training on biosafety and biosecurity	<ul style="list-style-type: none"> Professionals working in Laboratories, and Blood Bank Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment facility operators 	15,000
Training on emergency preparedness and response	<ul style="list-style-type: none"> Professionals working in in Laboratory, HCF Isolation, quarantine and treatment Centre, blood services. Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment facility operators 	20,000
Training LMP and SEP	<ul style="list-style-type: none"> Consultants and contractor staff carrying out renovation of the HCF. Training of officers involved in the project on environment and social safeguards 	20,000
Training on handling pathogenic and potentially lethal agents	<ul style="list-style-type: none"> Professionals working in the Laboratory, HCF. Isolation and Centre. Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment operators. 	20,000
Training on use of MSDSs, health and safe work practices, and appropriate PPE	<ul style="list-style-type: none"> Professionals working in the Laboratory, HCF. Isolation, quarantine and treatment Centre, Consultant & Contractor staff. Cleaners, waste transporters and handlers, incinerator operators, liquid waste treatment operators 	20,000
Training of HCF on proper	<ul style="list-style-type: none"> Professionals working in the Laboratory, HCF, 	20,000

implementation of their specific ICWM/ESMP during operations	Isolation, quarantine and treatment Centre, blood services.	
Training of the HCF with medical waste disposal facilities installed on proper implementation of their specific ICWMP/ESMP during operations;	• Professionals working in the Laboratory, HCF, Isolation and treatment Centre, blood services.	15,000
Training on comp 3& 4 contractors and workers on the sub-project specific ESMP	• Construction company workers for component 3 and component 4	20,000
Environmental Assessments and Audits	Contracted NEMA registered Lead Experts Consultants	200,000
Indicative Total		400,000

9 Annexes

- I. Screening Form for Potential Environmental and Social Issues
- II. Environmental and Social Management Plan (ESMP)
- III. Infection Control and Waste Management Plan (ICWMP)
- IV. Chance Find Procedure
- V. Resource List: COVID-19 Guidance

Annex I: Screening Form for Potential Environmental and Social Issues

E & S Screening Form: This form will be completed during identification of project activities by the Environment and Social Specialists in Project Implementation Unit (PMT) to screen for the potential environmental and social risks and impacts of a proposed sub-project. It will help the PMT in: (i) identifying the relevant Environmental and Social Standards (ESS); (ii) establishing an appropriate E&S risk rating for these sub-projects; and (iii) specifying the type of environmental and social assessment require; including specific instruments/plans. The completed forms will be signed and the record stored.

This form will allow the PMT to form an initial view of the potential risks and impacts of a sub-project. **It is not a substitute for project-specific E&S assessments or specific mitigation plans.**

A note on Considerations and Tools for E&S Screening and Risk Rating is included in this Annex I to assist the process.

Sub-project Name	
Sub-project Location	
Sub-project Proponent	
Estimated Investment	
Start/Completion Date	

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	No		
Does the sub-project involve civil works including new construction, expansion, upgrading or rehabilitation of healthcare facilities and/or waste management facilities?			ESS1	ESIA/ESMP, SEP
Does the sub-project involve long-term, permanent and/or irreversible adverse impacts (e.g. loss of major natural habitat);	*		ESS1	ESIA/ESMP, SEP
Does the sub-project involve significant adverse social impacts and may give rise to significant social conflict;	*		ESS1	ESIA/ESMP, SEP
Does the sub-project involve land acquisition and/or restrictions on land use?	*		ESS5	RAP/ARAP, SEP
Will the activities affect lands or rights of VMGs or other vulnerable minorities;	*		ESS5	RAP/ARAP, SEP
Does the sub-project involve permanent resettlement or land acquisition?	*		ESS5	RAP/ARAP, SEP
Does the sub-project involve acquisition of assets for quarantine, isolation or medical treatment purposes?			ESS5	
Is the sub-project associated with any external waste management facilities such as a sanitary landfill, incinerator, or waste water treatment plant for healthcare waste disposal?			ESS3	ESIA/ESMP, SEP
Is there a sound regulatory framework and institutional capacity in place for healthcare facility infection control and healthcare waste management?			ESS1	ESIA/ESMP, SEP
Does the sub-project have an adequate system in place (capacity, processes and management) to address waste?				HASP (Health and Safety Plan)
Does the sub-project involve recruitment of workers including direct, contracted, primary supply, and/or community workers?			ESS2	LMP,/SEP

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	No		
Does the sub-project have appropriate OSH procedures in place, and an adequate supply of PPE (where necessary)?				HASP (Health and Safety Plan)
Does the sub-project have a GRM in place, to which all workers have access, designed to respond quickly and effectively?				SEP/LMP
Does the sub-project involve trans boundary transportation (including Potentially infected specimens may be transported from healthcare facilities to testing laboratories, and trans boundary) of specimen, samples, infectious and hazardous materials?			ESS3	ESIA/ESMP, SEP
Does the sub-project involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?			ESS4	ESIA/ESMP, SEP
Will the activities have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID19 cases;	*		ESS4	ESIA/ESMP, SEP
Is the sub-project located within or in the vicinity of any ecologically sensitive areas?			ESS6	ESIA/ESMP, SEP
Are there any indigenous groups (meeting specified ESS7 criteria) present in the sub-project area and are they likely to be affected by the proposed sub-project negatively or positively?			ESS7	Indigenous Peoples Plan/other plan reflecting agreed terminology
Does the sub-project require Free Prior Informed Consent (FPIC);	*		ESS7	Indigenous Peoples Plan/other plan reflecting agreed terminology

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	No		
Is the sub-project located within or in the vicinity of any known cultural heritage sites?	*		ESS8	ESIA/ESMP, SEP
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	ESIA/ESMP, SEP
Is there any territorial dispute between two or more countries in the sub-project and its ancillary aspects and related activities?			OP7.60 Projects in Disputed Areas	Governments concerned agree
Will the sub-project and related activities involve the use or potential pollution of, or be located in international waterways ¹⁹ ?			OP7.50 Projects on International Waterways	Notification (or exceptions)

* The exclusion list of the sub-projects. If any of these parameters are “Yes”, the sub-project is excluded from financing under the program.

The Environmental and Social Commitment Plan (ESCP) prepared for the project has clearly outlined the activities considered as ineligible for financing under the project/exclusion list of activities that will not be financed under the project and that will be screen out. These include:

- Activities that may cause long-term, permanent and/or irreversible adverse impacts (e.g. loss of major natural habitat);
- Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19;
- Activities that may have significant adverse social impacts and may give rise to significant social conflict;
- Activities which would require Free Prior Informed Consent (FPIC);
- Activities that may affect lands or rights of VMGs or other vulnerable minorities; and
- Activities that may involve permanent resettlement or land acquisition or adverse impacts on cultural heritage.

¹⁹ International waterways include any river, canal, lake or similar body of water that forms a boundary between, or any river or surface water that flows through two or more states.

Conclusions:

- 1. Proposed sub-project is eligible for financing under the project criteria:**

.....

- 2. Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low).
Provide Justification:.**

.....

- 3. Proposed E&S Management Plans/ Instrument:**

.....

Certification

Reviewed and approved by			
MoH Environment Specialist		MoH Social Specialist	
Name:		Name:	
Date	Signature	Date	Signature

INFECTION CONTROL: CONSIDERATIONS AND TOOLS TO ASSIST IN E&S SCREENING AND RISK RATING:

In the context of global COVID-19 outbreak, Kenya has adopted a containment strategy that includes extensive testing, quarantine, isolation and treatment either in a medical facility or at home.

Kenya COVID-19 response project include the following activities:

- Construction/renovations, of and/or operational support to medical laboratories, quarantine and isolation centres at selected high risk counties, and infection treatment centres in existing healthcare facilities
- procurement and delivery of medical supplies, equipment and materials, such as reagents, chemicals, and Personal Protective Equipment (PPEs)
- transportation of potentially infected specimens from healthcare facilities to testing laboratories
- construction, expansion or enhancing healthcare waste treatment facilities
- training of medical workers and volunteers; and
- community engagement and communication

1. Screening E&S Risks of Medical laboratories

Kenya COVID-19 project include capacity building and operational support to existing medical laboratories. It is important that such laboratories have in place procedures relevant to appropriate biosafety practices. WHO advises that non-propagative diagnostic work can be conducted in a Biosafety Level 2 (BSL-2) laboratory, while propagative work should be conducted at a BSL-3 laboratory. Patient specimens should be transported as Category B infectious substance (UN3373), while viral cultures or isolates should be transported as Category A “Infectious substance, affecting humans” (UN2814). The process for assessing the biosafety level of a medical laboratory (including management of the laboratory operations and the transportation of specimens) should consider both biosafety and general safety risks. OSH of workers in the laboratory and potential community exposure to the virus should be considered.

The following documents provide further guidance on screening of the E&S risks associated with a medical laboratory. They also provide information for assessing and managing the risks.

- WHO; Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios
- WHO Covid-19 Technical Guidance: Laboratory testing for 2019-nCoV in humans:
- WHO Laboratory Biosafety Manual, 3rd edition
- USCDC, EPA, DOT, et al; Managing Solid Waste Contaminated with a Category A Infectious Substance (August 2019)

2. Screening E&S Risks of Quarantine and Isolation Centers

According to WHO:

- **Quarantine** is the restriction of activities of or the separation of persons who are not ill but who may have been exposed to an infectious agent or disease, with the objective of monitoring their symptoms and ensuring the early detection of cases
- **Isolation** is the separation of ill or infected persons from others to prevent the spread of infection or contamination.

Kenya COVID-19 project includes: construction, renovation and equipping of quarantine and isolation centers at Point of Entry (POE), in urban and in remote areas. There may also be circumstances where

tents are used for quarantine or isolation. Public or private facilities such as a stadium or hotel may also be acquired for this purpose.

In screening for E&S risks associated with quarantine and isolation, the following may be considered:

- contextual risks such as conflicts and presence or influx of refugees;
- construction and decommissioning related risks;
- land or asset acquisition;
- use of security personnel or military forces;
- availability of minimum requirements of food, fuel, water, hygiene;
- whether infection prevention and control, and monitoring of quarantined persons can be carried out effectively;
- whether adequate systems are in place for waste and waste-water management;
- the facility arrangement and whether there is a separation of male and female accommodation and for children;
- the sanitary conditions: separate toilet and bathrooms;
- security for the patients in the facilities; and
- whether there is water and lighting at the facility.

The following documents provide further guidance regarding quarantine of persons.

- WHO; Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)
- WHO; Key considerations for repatriation and quarantine of travelers in relation to the outbreak of novel coronavirus 2019-nCoV
- WHO; Preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings

3. SCREENING E&S RISKS OF TREATMENT CENTERS

WHO has published a manual that provides recommendations, technical guidance, standards and minimum requirements for setting up and operating severe acute respiratory infection (SARI) treatment centers in low- and middle-income countries and limited-resource settings, including the standards needed to re-purpose an existing building into a SARI treatment center, and specifically for acute respiratory infections that have the potential for rapid spread and may cause epidemics or pandemics.

- WHO Severe Acute Respiratory Infections Treatment Centre
- WHO Covid-19 Technical Guidance: Infection prevention and control / WASH
- WBG EHS Guidelines for Healthcare Facilities

4. SCREENING E&S RISKS RELATING TO LABOR AND WORKING CONDITIONS

Kenya COVID-19 project will include different types of workers. In addition to regular medical workers and laboratory workers who would normally be classified as direct workers, the project may include contracted workers to carry out construction and community workers (such as community health volunteers) to provide clinical support, contact tracing, and data collection, etc. The size of the workforce engaged could be considerable. Risks for such a workforce will range from occupational health and safety to types of contracts and terms and conditions of employment. There are also risks related to gender-based violence (GBV) and sexual exploitation and abuse (SEA). Further details relevant to labor and working conditions for Kenya COVID-19 ERP are discussed in the LMP prepared under the project.

Annex II: Environmental and Social Management Plan (ESMP)

Introduction

An Environmental and Social Management Plan (ESMP) for the proposed project is intended to ensure implementation of environmental and social management of its activities through the project lifecycle. An ESMP translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent.

The ESMP relevant to the project shall be prepared as part of ESIA for project facilities and implemented throughout project life-time. The main components of an ESMP are described in Tables below:

- (a) Table 9.1: Environmental and Social Risks and Mitigation Measures during Planning and Designing Stage,
- (b) Table 9.2: Environmental and Social Risks and Mitigation Measures during Construction Stage,
- (c) Table 9.3: Environmental and Social Risks and Mitigation Measures during Operational Stage, and
- (d) Table 9.4: Environmental and Social Risks and Mitigation Measures during Decommissioning.

Table 9- 1: Environmental and Social Risks and Mitigation Measures during Planning and Designing Stage

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Type , location and scale of healthcare facilities (HCF)	Poor site selection of the COVID19 health, quarantine and isolation facility	<p>Renovate the requisite facilities and ensure safe and adequate space for quarantine of necessary number of individuals,</p> <p>Security measures should be enhanced around the quarantine areas,</p> <p>People living in the environs of a quarantine/isolation centres and health facilities shall be given accurate information on the pandemic and receive updates on COVID-19.</p> <p>Provide appropriate and minimum recommended PPEs such as medical mask, gown, heavy duty gloves, eye protection and boots to all staff at the facility.</p> <p>Supplies needed to sustain quarantine shall be easily delivered on need basis. Food, water and sanitation requirements are among the basics supplies for quarantine areas.</p> <p>Provide psycho social support to the neighboring communities ,</p> <p>Renovate the facilities to meet the special needs of the quarantined population (e.g. children, pregnant women, people with disabilities, and differing cultures and religions) shall be considered and prioritized.</p> <p>Ensure availability of adequate healthcare waste handling and management at the sites.</p> <p>Renovate the facilities to meet the requirements on spatial separation between patients and clinicians,</p>	MoH
	Improper design and functional layout of healthcare facilities	<p>The design, construction, operation and decommissioning of the project activities should follow the national legal requirements, the WBG EHS guidelines and other good international industry practices,</p> <p>Structural elements of the project should be constructed by a competent professional certified and approved by National Construction Authority,</p> <p>All structural designs and construction works should promote quality and safety, and other considerations relating to climate change,</p> <p>The designs of the new buildings with free public access should consider the risks of potential exposure to operational accidents or natural hazards such as extreme weather events,</p> <p>All the new construction designs will consider the concept of universal access that allows for</p>	MoH, County Physical Planning Unit

COVID-19 Response ESMF – ESMP

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>unimpeded access for all people of different ages and abilities. This will include provision of the ramps, elevators and toilets for the disabled.</p> <p>Quarantine facility should offer at least 3 SQM of space per person for personal space at a quarantine site exclusive of space required for eating, recreation, offices or ancillary services.</p> <p>An option of isolated unsuited rooms with washroom facilities is preferred.</p> <p>A dormitory set-up with a maximum of 5 -10 beds per room or zone separated from one another by a curtain or wall with each bed separated by a minimum of 1metre from all sides with adequate wash room Facilities.</p>	
Identify the need for new construction, expansion, upgrading and/or rehabilitation	Nosocomial Infection Control	<p>Building designs of the renovated health facilities shall be in line with the national building code and the standard health care setting building designs. The design contracts should include sustainability considerations especially on use of energy and water to the extent possible,</p> <p>Traffic flow shall be considered to minimize exposure of high risk patients and facilitate patient transport.</p> <p>Adequate spatial separation of patients is key, the patients care areas shall be stratified by risk of the patient population for acquisition of infections. The four main degrees of risk to be considered include; Low risk areas e.g. administrative sections, moderate risks e.g. regular patient units, high risk areas e.g. isolation units, intensive care units, very high risk e.g. operating rooms.</p> <p>Adequate number and type of isolation rooms shall be provided with a minimum of least 1 meter space separation between patients to reduce on transmission of infections as well as allow ease in access of health care workers to attend to patients.</p> <p>It would be critical to have separate rooms for children and young people and special care given to members of VMGs and other vulnerable people such as persons with disabilities and older persons.</p> <p>Provision of the right receptacles for waste handling and containment including considerations on waste transfer to provide for minimal disruptions and avoidance of contamination of clean areas during waste collection and on site transportation.</p> <p>Provisions relating to putting in place other standard precautions must be ensured in order to assure cutting transmission of such nosocomial infections.</p>	MoH, Medical Superintendent

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Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	Improper selection / design/operation of medical Waste disposal facility	<ul style="list-style-type: none"> • Due diligence will be undertaken for existing facilities to check on the efficiency of waste management systems for waste treated on-site and off-site transportation for treatment and final disposal using registered waste transport and disposal companies to determine if the existing practices are aligned with the national guidelines, WBG EHS guidelines and WB ESF, • The design and technology to be selected will be based on available supporting infrastructure and resources (reliable resources of power, fuel, skilled technicians and operators), • Carry out Environment and Social Impact Assessment for construction and/or installation of the site specific waste treatment facilities, capturing clear analysis of design alternatives and site selection process, • In the case of incinerators, site selection is important and should consider the prevailing winds which should blow away from occupied buildings to limit exposure to emissions, siting location must be compatible with the premises neighborhood, • Due diligence of the suppliers must be undertaken to ensure procurement of good quality waste treatment equipment and provide the necessary service and support such as the warranty period, servicing and maintenance of the equipment and training of the operators, • Ensure there is adequate storage area of healthcare waste to accommodate peak waste generated due to increased patient intake in comparison to the average monthly medical waste generated, • Undertake environmental and social audits on the waste treatment facilities and acquire the necessary license to operate the waste treatment facility from NEMA in line with <u>EMCA Waste Management Regulations, 2006</u>, • The beneficiary health facilities, laboratories should provide the budget to maintain, repair and operate the treatment facilities • Train all staff involved in the operation of waste treatment facilities such as incinerators and provide them with appropriate required PPEs, 	MoH

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Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Identify on-site and off-site waste management facilities, and waste transportation routes and service providers	Inadequate facilities and processes for treatment of waste	<p>Ensure waste are recycled / reused before opting to dispose of,</p> <p>Use of waste receptacles to hold waste on site before its collection,</p> <p>Use of durable, long-lasting materials that will not need to be replaced often,</p> <p>Contract NEMA registered waste handler to dispose of hazardous waste and have waste destruction certificate and waste transfer notes.</p> <p>Designate temporal waste / garbage holding areas at site</p>	MoH,
	Waste segregation, storage and processing	<p>Health care facilities should establish, operate and maintain a health care waste management system (HWMS) adequate for the scale and type of activities and identified hazards;</p> <p>There shall be a cleaning and disinfection point, temporary waste storage, organic pit, sharps pit and incinerator with ash pit.</p> <p>The laboratories carrying out the testing of COVID-19 shall install a high-temperature incinerator that can reach 1200 °C and 2 second smoke-retention time or install a waste treatment facility, like medical waste microwave or autoclave that meets NEMA's waste treatment sterilization log.</p>	MOH, CPHO, Medical Superintendent, Biosafety Officer, NEMA-CD
HCF design – general	Structural safety risk; Poor functional layout and engineering control	<p>The design, construction, operation and decommissioning of the project activities should follow the national legal requirements, the WBG EHS guidelines and other good international industry practices,</p> <p>Structural elements of the project should be constructed by a competent professional certified and approved by National Construction authority,</p> <p>All structural designs and construction works contracts should promote quality and safety, and other considerations relating to climate change and sustainability considerations especially on use of energy and water to the extent possible</p> <p>All the new construction designs will consider the concept of universal access that allows for unimpeded access for all people of different ages and abilities. This will include provision of the ramps, elevators and toilets for the disabled.</p> <p>Quarantine facility should offer at least 3 SQM of space per person for personal space at a quarantine site exclusive of space required for eating, recreation, offices or ancillary services.</p> <p>A dormitory setup with a maximum of 5 -10 beds per room or zone separated from one another by a curtain or wall with each bed separated by a minimum of 1metre from all sides with adequate</p>	MoH, NCA, DOSH

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Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		wash-room Facilities.	
HCF design - considerations for differentiated treatment for groups of higher sensitivity or vulnerable (the elderly, those with pre-existing conditions, or the very young) and those with disabilities	Some groups may have difficulty accessing health facilities	Provision of ramp for the disabled Have separate rooms for children and young people and special care given to members of VMGs and other vulnerable people such as persons with disability and older persons.	MoH, CPHO,
Design of facility should reflect specific treatment requirements, including triage, isolation or quarantine	In appropriate sanitary and wash facilities	Set up a management system specific to case management structures under the management of MOH (finance, logistics, administration, etc.) Build triage centres in referral hospitals or in health facilities according to the dynamics of COVID-19 pandemic. Provide cleaning and disinfection point, temporary waste storage, organic pit, sharp pit and incinerator with ash pit at the site, Provide a separate flushing toilet or latrine with a door separating the area from the patient's room Separate sanitary convenience for health workers	MoH, DOSH, CPHO
Design to consider mortuary arrangements	Insufficient capacity Spread of infection	Improve biosecurity and harmonize care protocols to avoid risk of infections of medical workers and other people.	MoH, CPHO
Identify points for placing WASH facilities at entrance/exit of all L4 and L5 facilities and at major bus stops and areas of public gatherings (5 per 111 counties sub-county in 14 counties)	-Inadequate facilities that will lead to crowding -Inadequate supply or stock outs (water, soap, tissue, etc.)	Make an assessment of the flow of patients to the health facilities in order to provide adequate WASH stations Engage with the County Government to ensure there are supplies through out Put protocols in place for the use of the facilities The health facilities should establish and apply procedure for hand hygiene in line with WHO guidelines. Sign boards on how to do proper hand wash should be provided at each hand wash station	MoH, PMT

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Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	<ul style="list-style-type: none"> -Vandalism -Management of waste water 	<p>In the case the hand wash supplies are not available the hospital should make arrangements for provision of alcohol based hand rubs</p> <p>The hand washing areas should have proper waste water management channeled to the drainage system</p>	
Renovation of quarantine units in all POEs and isolation facilities at health facilities	<ul style="list-style-type: none"> -SEA/GBV at the workplace -Labour and contractual problems -Interference with service provision -Inaccessibility for persons with disability 	<ul style="list-style-type: none"> -Ensure there is gender consideration at the workplace -Work with the contractor to ensure there is provision for ramps for easy access for persons with disability -All workers to sign a code of conduct -Structure the works in such a manner that there is limited interruption in health service 	<p>MoH</p> <p>County Governments</p>
Feedback and adaptive communication	<ul style="list-style-type: none"> -Lack of access to HUTLCs/VMGs who may not understand the language used -Limited feedback loops between the community and the PMT 	<ul style="list-style-type: none"> -Identify the HUTLCs/VMGs in the 14 counties -Define their communication needs -Identify existing channels of communication 	<p>MoH</p> <p>County Teams</p>

Table 9- 2: Environmental and Social Risks and Mitigation Measures during Construction Stage

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Clearing of vegetation and trees; Construction activities near ecologically sensitive areas/spots	- Impacts on natural habitats, ecological resources and biodiversity	Confine construction activities within the immediate project site, Acquire construction materials from the NEMA licensed quarries and/or suppliers Plant vegetation cover at affected areas during project closure	Contractor, Medical superintendents CPHO, Environment specialist for MoH,
General construction activities	- Resource efficiency issues, including raw materials, water and energy use; - Materials supply	Adhere to the procurement plan for acquisition of all resources and materials. Source building materials from local suppliers who to extent possible through use environmentally friendly processes in their operations and are licensed by relevant national agencies / authorities, Restrict the sourcing of materials from registered and NEMA licensed quarry areas and /or suppliers, Ensure accurate budgeting and estimation of actual construction material requirements, Ensure that damage or loss of materials at the construction site is kept minimal through procurement of small quantities and proper storage. The design contracts should include sustainability considerations for the service providers installing the medical equipment and waste management facilities; and Do not to extent possible open new material sites for the project, unless licensed.	Contractor, Medical superintendents CPHO, Environment specialist for MoH,
General construction activities – general pollution management	- Construction solid waste; - Construction waste water; - Noise; - Vibration; - Dust; - Air emissions from construction equipment	Ensure waste are recycled / reused before opting to dispose of, Use of waste receptacles to hold waste on site before its collection, Use of durable, long-lasting materials that will not need to be replaced often, Contract NEMA registered waste handler to dispose of hazardous waste and have waste destruction certificate and waste transfer notes. Designate temporal waste / garbage holding areas at site Contractor should be responsible for handling and disposal of all construction and related waste; Waste disposal by burning should not be permitted and signage should be erected; All infectious effluents should be discharged into the sewerage system or soak pits only after being treated according to WHO standards Ensure that noise & vibration levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities. Maintain the construction equipment in good working conditions as per the operation manual, Provide fit to work PPEs for all workers involved in the areas with elevated hazard levels and enforce on use. Coordinate with the HCF staff as to determining timing and more importantly what specific noise controls and mitigations may be needed (beyond standard construction measures) Careful screening of construction site to contain and arrest construction-related dust.	Contractor, Medical superintendents CPHO, Environment specialist for MoH,

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>Strict measures be applied for the handling of construction materials in powder form such as cement, lime, concrete additives, etc.</p> <p>Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or covered by tarpaulin while on transit.</p> <p>Wet all active construction areas as and when necessary to lay dust;</p> <p>Vehicle speeds be limited to a maximum of 30km/h within the health facilities</p> <p>Maintain periodically all equipment and machinery as per the operation manual</p>	
Waste water management	- Contamination of environment and infections	<p>All waste water from the construction sites will be stored according to the containment measures to mitigate soil and water contamination,</p> <p>All infectious effluents shall be discharged into the sewerage system or soak pits only after being treated and tested according to WHO standards. Contractor will direct waste water to the sewer system or as advised by the hospital management</p> <p>Ensure provision of clean sanitary facilities for workers,</p>	Contractor, Medical superintendents CPHO, Environment specialist for MoH,
Construction / renovation related noise and vibration	- Noise and Vibration	<p>Notify the public of the intended works prior to beginning construction,</p> <p>Ensure that noise & vibration levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities,</p> <p>Maintain the construction equipment in good working conditions as per the operation manual,</p> <p>Provide fit to work PPEs for all workers involved in the areas with elevated hazard levels,</p> <p>Construction workers should be aware of the sensitive nature of work place they are operating in and advised to limit verbal and other forms of noise.</p> <p>Coordinate with the HCF staff as to determining timing and more importantly what specific noise controls and mitigations may be needed (beyond standard construction measures)</p>	Contractor, Medical superintendents CPHO, Environment specialist for MoH,
Construction / renovation related hazards	- Dust and Emission Management	<p>Careful screening of construction site to contain and arrest construction-related dust.</p> <p>Strict measures shall be applied for the handling of construction materials in powder form such as cement, lime, concrete additives, etc.</p> <p>Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or covered by tarpaulin while on transit.</p> <p>Wet all active construction areas as and when necessary to lay dust;</p> <p>Vehicle speeds shall be limited to a maximum of 30km/h.</p> <p>Wet all access roads during hauling of construction material during dry days.</p> <p>Maintain periodically all equipment and machinery as per the operation manual</p>	Contractor, Medical superintendents CPHO, Environment specialist for MoH,
General construction activities – hazardous waste management	- Fuel, oils, lubricant & Asbestos Containing Materials	<p>Update existing HCF Emergency Response Plan and train the contractors on the specific HCF risks and related mitigation measures (including evacuation routes) including Fire and Oil Spillage, and make it available to the project stakeholders.</p> <p>Any hazardous materials shall be handled by NEMA licensed waste-handlers, as per agreement</p>	Contractor, Medical superintendents CPHO, Environment

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>between the project and the County government.</p> <p>Asbestos materials safe handling, management and disposal shall be undertaken following the NEMA guidelines on asbestos management and the WBG EHS guidelines.</p> <p>If ACM at a given hospital is to be removed or repaired, the MOH will stipulate required removal and repair procedures in the contractor's contract.</p> <p>Contractors will remove or repair ACM strictly in accordance with their contract. Removal personnel will have proper training prior to removal of ACM.</p> <p>All asbestos waste and products containing asbestos is to be buried at a licensed landfill and not to be tampered or broken down to ensure no fibers are airborne.</p> <p>Contractors must provide suitable containment and storage of chemicals and hydrocarbons to prevent soil contamination and pollution to ground or water (surface and ground).</p> <p>All workers shall be provided with fit for work PPEs.</p> <p>Train staff on containment and spill response of hazardous waste and management,</p> <p>Consider ensuring specific clause in construction contract to deal with ACM,</p> <p>Construct ash pit as part of the renovation of the incinerator for use in disposing ashes,</p>	specialist for MoH, and RE
Construction related disruption	- Temporary disruption of healthcare services	<p>Plan pre-construction activities shall be done early to identify suitable rooms or adjoining buildings into which patients or service areas can be relocated with minimal inconvenience, especially to patients under intensive care.</p> <p>Advance relocation information shall be shared with the affected patients for their planning and mental preparedness.</p> <p>Contractors shall work closely and harmoniously with healthcare facility administrators to find practical ways to minimize social cost of temporary disruption of services.</p> <p>A grievance mechanism to address complaints from community shall be in place and awareness promoted.</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist, and RE
Construction related disruption	<p>Occupational Health and Safety (OSH)</p> <p>Exposure to asbestos containing materials.</p> <p>Burns from welding (hot works)</p> <p>Falls from working at heights or wet surfaces</p> <p>Electrocution.</p> <p>Noise and body vibration during demolition</p> <p>Injury from falling or</p>	<p>The contractor shall prepare a OSH plan for the construction works, and should include input from HCF personnel on potential health and safety risks associated with the HCF</p> <p>Restricting access to active renovation sites, including establishment of security perimeter.</p> <p>Use institutional and administrative controls with a focus of high risk areas including</p> <ul style="list-style-type: none"> -Screening off of or fencing the site, and -Provision of adequate signage and communication of risks to workers, patients and the health community. <p>The HCF staff, key service providers and the public should be notified of the works through appropriate publicly accessible sites such as the main entrance to the health facility;</p> <p>Barricading the work areas to prevent entry of health staff and patients in the work sites,</p> <p>Place adequate signboards to divert staff and passengers away from the work sites,</p> <p>Use of screens/nets to avoid flying debris, ensure good housekeeping in the construction sites;</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	<p>flying debris when demolishing walls</p> <p>Transient pools of water that may become breeding ground for mosquitoes</p> <p>Traffic accidents.</p>	<p>All workers should be adequately trained on the use of PPEs which they should wear at all times while at the work-site;</p> <p>Contractor shall provide on-site toilet and washing water for workers.</p> <p>The water storage tank shall be covered and properly managed to minimize mosquitoes breeding.</p> <p>Traffic safety plan shall be established for each site by the contractor.</p> <p>Safety perimeters shall be established around the hazardous areas (around overall construction site, at heights, around wet surfaces, excavated areas, etc.).</p>	
General construction activities – Labor issues	<ul style="list-style-type: none"> - Community exposure to work related hazard 	<p>Restricting access to active renovation sites.</p> <p>Use institutional and administrative controls with a focus of high risk areas including</p> <ul style="list-style-type: none"> -Screening off of or fencing the site, and -Provision of adequate signage and communication of risks to workers, patients and the health community. -The public should be notified of the works through appropriate publicly accessible sites such as the main entrance to the health facility; <p>Only authorised visitors shall access the sites and wear basic PPE all the time</p> <p>Workers shall be adequately trained on use of PPE which they should wear at all times while on the work site,</p>	<p>Contractor, Medical superintendents</p> <p>CPHO, MoH Environment specialist and RE</p>
General construction activities – Labor issues	<ul style="list-style-type: none"> - Community exposure to health issues - Workers coming from infected areas - Co-workers becoming infected - Workers introducing infection into community/general public 	<p>Appropriate timely information be provided at all levels on risks of infection between community members and workers.</p> <p>Raise awareness on appropriate behavior including prevention of infectious diseases and sexual harassment, exploitation and abuse.</p> <p>Carry out HIV/AIDS awareness and control campaigns in the project targeting workers.</p> <p>Have VCT services on site and encourage workers to undergo testing.</p> <p>Provision of protective devices such as condoms.</p> <p>Contractor code of conduct to promote appropriate behavior and ensure compliance with COVID 19 prevention measures.</p> <p>In cases of COVID-19 at the construction sites, guidelines have been provided in this ESMF Annex III: Infection, Prevention and Control Protocol on minimization of exposure, training of staff and precautions and management of access and spread</p>	<p>Contractor, Medical superintendents</p> <p>CPHO, MoH Environment specialist and RE</p>
General construction activities – traffic and road safety	Increased road accident	<p>Develop traffic Management Plan</p> <p>Appropriate traffic safety through segregating traffic safety, machine operation and walking areas to reduce on conflicts.</p> <p>Use of one-way traffic routes,</p> <p>Establishment of speed limits and</p> <p>Onsite trained flag personnel wearing high visibility vests to direct traffic.</p>	<p>Contractor, Medical superintendents</p> <p>CPHO, MoH Environment specialist, and RE</p>

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>Contractor shall avoid the hospital peak hours for transport of the construction materials.</p> <p>Contractor shall emphasize safety aspects among project drivers especially speed limits to the health facilities.</p> <p>Contractors shall regularly inspect vehicle safety and employ trained drivers to minimize the accidents.</p> <p>Trucks shall be covered with tarpaulin and have tailgates during haulage of construction materials and access roads sprayed with water to reduce on dust levels.</p>	
General construction activities – security personnel	Confrontation between security and public and property vandalism	<p>Security personnel should follow strict rules of engagement and avoid any escalation of the situation,</p> <p>Training and or implementation of strict guidelines for engagement of armed security personnel</p> <p>Monitoring of the behavior of the security personnel over the rules of engagement</p> <p>Community members encouraged to report any concerns through instituted GRM</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE
General construction activities	Labour Influx and Disruption of Social Ties through quarantine and isolation centres	<p>It is critical that the recruitment of the labor force factors in the engagement of local people as appropriate.</p> <p>The Labour Management Procedures (LMP) for this project has provided the necessary provisions to be referenced by the contractors and the PMT.</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE
General construction activities	Labor and working conditions	<p>Application of OSH measures as outlined in the sub-project specific ESMP and ICMWP noted under ESS1 as well as WHO guidelines</p> <p>Provision of immediate and ongoing training on the procedures to all categories of workers,</p> <p>Post signage in all public spaces mandating hand hygiene and PPE;</p> <p>Ensuring adequate supplies of PPE (particularly face mask, gowns, gloves, hand washing soap and sanitizer); and</p> <p>Ensuring adequate OSH protections in accordance with General EHSGs and industry specific EHSGs</p>	Contractor, Medical superintendents CPHO, Environment specialist for MoH, and RE
General construction activities – cultural heritage	Cultural heritage	<p>Pre-construction surveys of any new site such as the POEs, incineration sites, should identify any cultural heritage resources (superficial/sub-surface) that the project should avoid;</p> <p>Follow chance find procedures</p> <p>Exclude activities that may involve permanent resettlement or land acquisition or adverse impacts on cultural heritage</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE
General construction activities – emergency preparedness and response	Fire hazards, Oil Spillage, Slip fall,	<p>Update and implement Emergency Response Plan including Fire and Oil Spillage, and make it available to the project stakeholders.</p> <p>Early identification of risks (Job Risk Assessment) and instituting proactive measures to avoid.</p> <p>Provision of personal protective equipment (PPE) to health workers.</p> <p>Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.</p>	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		Provide fire extinguishers to healthcare facilities during their renovation. Fire emergency telephone numbers should be displaced in communal areas Undertake fire drills at healthcare facility, at a minimum once a year.	
Temporary disruption of healthcare services	Delay in service providence to patients or by scaring the patients away the patients	Plan pre-construction activities early to identify suitable rooms or adjoining buildings into which patients or service areas can be relocated with minimal inconvenience, especially to patients under intensive care. Advance relocation information should be shared with the affected patients for their planning mental preparedness. A grievance mechanism to address complaints from community shall be in place	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE
General construction activities – GBV/SHEA	-Abuse between workers at the workplace	-ensure separation of activities for women and men -Ensure that all workers sign a code of conduct	Contractor, Medical superintendents CPHO, MoH Environment specialist and RE

Table 9-3: Environmental and Social Risks and Mitigation Measures during Operational Stage

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Procurement of medical supplies and equipment	Impact as a result of improper procurement	Adhere to the procurement plan for acquisition of all medical supplies and equipment from certified suppliers only, Carry out due diligence for all potential suppliers to guarantee quality equipment and products, WHO interim guidance on rational use of PPE for corona virus disease 2019 provided further details on the types and quality of PPE that are required for different functions. The healthcare workers shall be provided with medical personal protective equipment (PPE) includes: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard), Boots/closed work shoes.	MoH Procurement officer, Medical Superintendent, Lab Manager
General operation HCF – Environment	Spread of COVID-19 infections	Health facilities should establish and apply Standard Precautions including: -Hand Hygiene (HH); -Respiratory hygiene/cough etiquette. -Use of personal protective equipment (PPE); -Handling of patient care equipment, and soiled linen;	MOH, CPHO, Medical Superintendent, Biosafety Officer,

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>-Environmental cleaning; -Prevention of needle-stick/sharp injuries; -Appropriate Health Care Waste Management;</p> <p>Health facilities should establish and apply Transmission based precautions (contact, droplet, and airborne precautions) as well as specific procedures for managing patients in isolation room/unit.</p> <p>Establishment of Standard precautions and Transmission based precautions in line with National guidelines for IPC in healthcare facilities and take into account guidance from WHO and/or CDC on COVID19 infection control,</p> <p>Collection of samples, transport of samples and testing of the clinical specimens from patients meeting the suspect case definition should be performed in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases.</p> <p>Tests should be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures.</p> <p>All hospitals and laboratories should prepare waste management procedures in accordance with the national requirements that outline waste segregation procedures, on site handling, collection, transport, treatment and disposal, and training of staff.</p> <p>Health facilities shall ensure the provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Health facilities shall establish and apply good practices line with WHO guidance on water, sanitation and waste management for COVID-19 and National guidelines for Infection Prevention and Control healthcare facilities.</p> <p>Samples that are potentially infectious materials (PIM) need to be handled and stored as described in WHO document Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses (PIM Guidance).</p>	
General operation – Environment	HCF – Traffic Hazards	<p>The relevant staff should be trained on pre-hospital emergency care, infection prevention and control measures, how to handle samples in transit, healthcare waste and spillage management in case of an accident and provided with the required PPE,</p> <p>Vehicles used as ambulances or for transporting any hazardous material and medical waste should be road worthy, labelled to indicate its load and its payload secured to minimize risk of accidents and spillage,</p> <p>Procure well equipped ambulances; ensure they are outfitted with audible back-up alarms as well as with effective communication system for emergency service functions and activities</p> <p>Ensuring the ambulances are outfitted with audible back-up alarms (for ambulances).</p> <p>Periodic community awareness traffic awareness campaign,</p> <p>Use of competent drivers with defensive driving techniques.</p> <p>MoH shall regularly inspect vehicle safety and maintain accordingly, and</p>	<p>Medical superintendents/facility in-charge</p> <p>CPHO, MoH Environment specialist and Lab Managers</p>

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Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
General operation Environment	HCF – Managing Blood/ Body fluid Exposure	<p>Ambulance drivers should follow guidance on safe emergency driving.</p> <p>Safely take off PPE according to the steps in the procedure, in the anteroom</p> <p>Treat affected exposed area:</p> <ul style="list-style-type: none"> wash the affected skin surfaces or the percutaneous injury site with soap and water Irrigate mucous membranes (e.g. conjunctiva) with copious amounts of water or an eyewash solution, and not with chlorine solutions or other disinfectants. <p>Immediately report the incident to the chief of unit, IPC focal point (following hospital exposure procedure) as soon as the HCF staff exist the isolation room/ unit.</p> <p>Exposed persons should be medically evaluated for:</p> <ul style="list-style-type: none"> infectious disease (ID) (of isolated patient) other potential exposures (e.g., HIV, HCV) if sharp/needle-stick injury <p>Exposed persons must receive follow-up care, including:</p> <ul style="list-style-type: none"> fever monitoring, twice daily period of recording symptoms will depend on the ID Counselling and psychological support. <p>Immediate consultation with an expert in infectious diseases for any exposed person who develops fever, symptoms after exposure.</p> <p>If fever appears and other symptoms, isolate HCF staff, and follow procedure for ID suspected until a negative diagnosis is confirmed.</p> <p>Workers suspected of having infected should be cared for/isolated, and the same recommendations outlined in this document must be applied until a negative diagnosis is confirmed.</p> <p>Conduct contact tracing and follow-up of family, friends, co-workers and other patients, who may have been exposed to COVID-19 virus through close contact with the infected HCW/ staff.</p>	Medical superintendents CPHO, MoH Environment specialist and Lab Managers
General operation Environment	HCF – General wastes, wastewater and air emissions	<p>-Ensure regular monitoring of solid, liquid waste management practices and ensure proper disposal through incineration.</p> <p>-Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for each facility in accordance with the national healthcare waste management plan.</p> <p>-To ensure proper sewage management and use of latrines where they there is no sewer.</p> <p>-Ministry of Health shall develop measures for proper management of expired pharmaceutical drugs and instigate this policy at all health care facilities,</p> <p>-Install appropriate drainage channel within the facility,</p> <p>-Assess existing waste water collection, treatment and disposal system, and if not acceptable, then include in the sub-project design and construction all necessary remedial measures,</p> <p>-Segregation, minimization and safe storage of potential sources of liquid wastes,</p>	Medical superintendents CPHO, MoH Environment specialist and Lab Managers

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>-Liquid waste originating from the laboratory should pass through different units for pre-treatment (decontaminate and dilute) before directing to the general sewer line where technically and financially feasible.</p>	
General operation HCF – Environment	Generation of waste water and faecal waste	<p>-People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine.</p> <p>-Where this is not possible, patients sharing the same ward should have access to toilets that are not used by patients in other wards.</p> <p>-Each toilet cubicle should have a door that closes, to separate it from the patient's room.</p> <p>-Flush toilets should operate properly and have functioning drain traps.</p> <p>-When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds.</p> <p>-If it is not possible to provide separate toilets for COVID-19 patients, then the toilets they share with other non-COVID-19 patients should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (impermeable gown, or if not available, an apron, heavy-duty gloves, boots, mask and goggles or a face shield).</p> <p>-Health-care staff should have toilet facilities that are separate from those used by all patients.</p> <p>-</p> <p>Best practices for protecting the health of sanitation workers should be followed:</p> <ul style="list-style-type: none"> • workers should wear appropriate PPE, which includes protective outerwear, heavy-duty gloves, boots, goggles or a face shield, and a mask; • perform hand hygiene frequently; • avoid touching their eyes, nose or mouth with unwashed hands, and • practice social distancing while working. 	Medical superintendents CPHO, MoH Environment specialist and Lab Managers
General operation – OSH issues HCF	Risk associated with procurement of Substandard PPEs	<p>Adhere to the procurement plan for acquisition of all resources and materials from certified suppliers only,</p> <p>Carry out due diligence for all potential suppliers to guarantee quality equipment and products,</p> <p>Abide by the WHO interim guidance on rational use of PPE for coronavirus disease 2019 over the types of PPE required for different functions.</p> <p>The healthcare workers shall be provided with medical personal protective equipment (PPE) includes: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard), Boots/closed work shoes.</p>	Medical superintendents CPHO, DOSH, MoH Environment specialist and Lab Managers
General operation – OSH issues HCF	<ul style="list-style-type: none"> - Physical hazards; - Electrical and explosive hazards; 	<p>-Update and implement HCF OSH plan and/or emergency response plan,</p> <p>Early identification of risks (Job Risk Assessment) and instituting proactive measures to avoid.</p>	Medical superintendents CPHO, DOSH, MOH Environment

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	<ul style="list-style-type: none"> - Ergonomic hazard; - Radioactive hazard - Biological hazards 	<p>Train the health care workers on the potential OSH risks especially in relation to COVID-19, Provision of adequate and required personal protective equipment (PPE) to health workers and enforce on use. This includes: single use medical mask, gown, Apron, eye protection, boots or closed shoes</p> <p>Provision of a system for disinfection of the multiuse PPE.</p> <p>Availing Material Safety Data Sheet for all chemical use in the lab to lab technicians.</p> <p>Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.</p>	specialist, and Lab Managers
	<ul style="list-style-type: none"> - Chemical use; - Radioactive hazard - Biological hazards 	<p>Targeted procurement of only required pharmaceutical, and other medical supplies in small quantities.</p> <p>Ensure regular monitoring of solid, liquid waste management practices and incineration.</p> <p>Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for each facility in accordance with the national healthcare waste management plan.</p> <p>To ensure proper sewage management and use of latrines where they there is no sewer.</p> <p>Ministry of Health shall develop measures for proper management of expired pharmaceutical drugs and instigate this policy at all health care facilities.</p> <p>Install appropriate drainage channel within the health facility.</p>	Medical superintendents CPHO, DOSH, MOH Environment specialist and Lab Managers
	<ul style="list-style-type: none"> - Risk of Fire 	<p>Provide fire extinguishers to healthcare facilities during their renovation at strategic positions.</p> <p>Key healthcare staff shall have basic training in fire control</p> <p>Fire emergency telephone numbers should be displayed in communal areas</p> <p>Each healthcare facility shall prepare a fire emergency management plan.</p> <p>Undertake regular fire drills at healthcare facility, to test on emergency response and use the results to improve on the response mechanism</p>	Medical superintendents CPHO, DOSH MoH Environment specialist and Lab Managers
Design and Site location of Incinerator	<ul style="list-style-type: none"> - Air pollution from onsite medical waste incinerators 	<p>Consultations with the public shall be done by the design consultant to inform the siting of incinerators before installation,</p> <p>Waste segregation at point of origin should be encouraged to minimize mixing of hazardous and non- hazardous waste.</p> <p>Engineering design of stacks on onsite brick incinerators should follow good international industry practice (GIIP) as outlined in World Bank EHS Guidelines: Air emissions and ambient air quality, April 2007.</p> <p>The health care waste management facilities on site should be regularly serviced and maintained, the scrubbers fitted at the incinerators should be periodically replaced</p> <p>Inspection/ monitoring: Healthcare administrators should undertake regular visual inspection of incinerator stack for incidents of downwash and undertake annual monitoring of emissions or a general environmental audit of entire healthcare facility.</p> <p>Training of incinerator operators is important for them to be familiar with basic principles and</p>	MoH Environment Officer, MS, DOSH and CPHO

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		routine practices. For example, homogenization of waste is crucial to ensure efficient and complete combustion during incineration to avoid generation of dioxins for instance when wet waste batches quench flames and lower combustion temperature below levels at which such pollutants are destroyed.	
HCF operation - considerations for differentiated treatment for groups with different needs (e.g. the elderly, those with preexisting conditions, the very young, people with disabilities)	Improper clinical care, isolation of suspected cases and follow-up of survivors	<p>Improve biosecurity and harmonize care protocols to avoid risk of infections of medical workers and other people.</p> <p>Build triage centers in referral hospitals or in health facilities according to the dynamics of COVID-19 pandemic.</p> <p>Set up a management system specific to case management structures under the management of MOH (finance, logistics, administration, etc.)</p> <p>Restructure the survivors' follow-up programme by fully integrating it into the clinical care.</p>	MoH , HCA, and CPHO
HCF operation – cleaning	Infection from contaminated surfaces	<p>Ensure the cleaning staff are provided with the minimum required PPE (rubber gloves, rubber boots, uniform and apron)</p> <p>Health facilities should utilize the required detergents and disinfectants</p>	MoH Environment Officer, MS, DOSH and CPHO
HCF operation - Infection control and waste management plan	Chronic effects to immediate community members	<p>Treatment of waste by environmentally sound methods including incineration;</p> <p>Disposal of residues in permitted, controlled, and properly designed disposal sites;</p> <p>Phase out the use of polyvinyl chloride (PVC) materials consistent with the availability of suitable replacement materials in the marketplace;</p>	MoH Environment Officer, MS, DOSH and CPHO
Waste Treatment	Use of incinerators results in emission of dioxins, furans and particulate matter	<ul style="list-style-type: none"> ➤ Where possible avoid the use of incinerators ➤ If small-scale incineration is the only option, this should be done using best practices, and plans should be in place to transition to alternative treatment as soon as practicable (such as steam treatment prior to disposal with sterile/non-infectious shredded waste and disposed of in suitable waste facilities) ➤ Do not use single-chamber, drum and brick incinerators ➤ If small-scale incinerators are used, adopt best practices to minimize operational impacts. 	MoH Environment Officer, MS, DOSH and CPHO
Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies	<p>-Infection to the handlers as well as community members</p> <p>-Increased waste generated from expired pharmaceutical products</p>	<p>-Establish a quality control system for laboratory samples</p> <p>Establish a (mobile) incinerator for destroying GeneExpert cartridges at higher than 1,200 °C</p> <p>Put in place innovative and efficient mechanisms to improve transport of Transit Centre samples to reference laboratories in the shortest time possible.</p> <p>Sample transportation should not expose transporters to risk either during normal handling or in case of an accident.</p> <p>Adhere to the procurement plan for acquisition of all resources and material and medical supplies.</p> <p>Records should be kept for each delivery of supplies including description of goods, quality, quantity, date of receipt and expiry of supplies</p> <p>Storage areas of pharmaceutical products should be in clean, dry, free from accumulated waste and</p>	MoH Environment Officer, DOSH and CPHO, Laboratory Manager

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		vermin and precautions should be taken to prevent unauthorized persons from entering the storage areas	
Storage and handling of specimen, samples, reagents, and infectious materials	Infection to the handlers as well as community members	Establish a quality control system for laboratory samples, Ensure waste management in accordance with existing WHO standard operating procedures (SOPs); Daily monitoring of laboratory capacity to ensure they are all able to accommodate the number of samples collected Organizing sample management (collection, storage, packaging and transport); Organizing training for COVID-19 diagnosis and sample management.	MoH Environment Officer, DOSH, Lab Manager and CPHO
	Risks associated with sample collection, packaging and laboratory procedure	Ensure proper medical waste management in accordance with existing WHO standard operating procedures (SOPs); Daily monitoring of laboratory capacity to ensure they are all able to accommodate the number of samples collected; Organizing sample management (collection, storage, packaging and transport) in accordance with WHO guidelines; Undertake a risk assessment for each processes involved in sample collection, packaging and transportation and identify appropriate risk control measures; and Regularly train the relevant health personnel on COVID-19 diagnosis and sample management	MoH, DOSH, Lab Manager and CPHO
Waste segregation, packaging, color coding and labeling	Infectious waste may lead to new infections	Each health facility should prepare Infectious Control and Waste Management Plans using the template on Annex iv; Segregation of wastes into different categories color coded and labelled for control of quantities and disposal methods.	MoH Environment Officer, Lab Manager, DOSH and CPHO
Onsite collection and transport	Nuisance and mixing of highly infectious with noninfectious waste	Disposal of residues in permitted, controlled, and properly designed disposal sites, Use of designated trolleys for transfer of waste to collection points, Use of appropriate minimum PPEs and periodic disinfection of the waste areas.	MoH Environment Officer, Lab Manager, DOSH and CPHO.
Waste storage	Mixing of highly infectious with noninfectious waste causing new infections	Segregation of wastes into different categories—for control of quantities and disposal methods	MoH Environment Officer, DOSH and CPHO
On-site waste treatment and disposal	Mixing of highly infectious with non-infectious waste causing new infections, localized air pollution	Ensure operator of incineration unit is adequately trained to ensure efficient operation. Consultations with potentially affected people should be done by design consultant to inform choice of location of incinerator at each site. Waste segregation at point of origin.	MoH Environment Officer, DOSH and CPHO

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Waste transportation to off-site treatment and disposal facilities	Waste dumping at non-licensed facility,	Carry out Environment and Social Due Diligence (ESDD) for potential waste transport and disposal companies, including applicable EHS clauses in service contract, comply with ESS 3 clause 9 (water use), and review of such facilities consistent with ESS2 and OSH aspects for Supply Workers; Use of licensed Waste handlers for transportation of waste off-site for treatment and disposal, Keeping record of waste transfer notes as well as waste destruction certificates at the point of disposal facility.	MoH Environment Officer, DOSH and CPHO
Transportation and disposal at off site waste management facilities	Waste dumping at non-licensed facility, Public health risk to the community	-Use of licensed healthcare waste handlers, Keeping record of waste transfer notes as well as waste destruction certificates at the point of disposal facility.	MoH Environment Officer, DOSH, MS and CPHO
Operation of acquired assets for holding potential COVID-19 patients	Lack of sustainability	A Facility Maintenance Plan shall be prepared and implemented at each medical facility. MoH shall ensure there is always a budget to sustain healthcare facilities in the country in a functional state. Equipment's available in the health facilities should be serviced and maintained regularly	MoH, Lab Manager, BTSC Directors, and CPHO
Operation of acquired assets for holding potential COVID-19 patients	Misuse or inability to use installed healthcare systems and equipment	Provide requisite training during equipment installation. Carry out regular supervision, ensure only trained authorized personnel operate equipment, The manual containing information on how the medical facilities and equipment should be safely handled should be made available to the relevant staff, Equipment's should be sanitized and disinfected before use to minimize risks of infections	MoH, MS, Biosafety Officer, and CPHO
Emergency events	<ul style="list-style-type: none"> - Occupational exposure to infectious disease; - Failure of solid waste and wastewater treatment facilities - Spillage; - Exposure to radiation; - Accidental releases of infectious or hazardous substances to the environment; - Medical equipment failure; 	<ul style="list-style-type: none"> ➤ Adhere to the MoH IPC strategies associated with health care for suspected COVID-19 infection ➤ Hiring of the full time Bio-Medical Lab / Hospital Engineers for handling and maintenance of the acquired medical equipment, ➤ Acquisition of appropriate waste handling receptacles to be used for collecting spillages, ➤ Display of legible safety signages at strategic areas, ➤ Use of administrative and engineering controls to manage potential hazards namely safety procedures, controlled access, use of appropriate containers to conveying hazardous substances like samples, screened / fenced off areas, hiring of security personnel e.tc; ➤ Display of material safety data sheet in the laboratories, ➤ Availing emergency response equipment like fire extinguishers and first aid boxes; ➤ Availing the trained First Aiders and Fire Marshall at the healthcare facilities, ➤ Initial processing of all specimens should take place in a validated biological safety cabinet (BSC) or primary containment device; and ➤ Develop the necessary Emergency Response Plan for respective healthcare facilities 	MoH Environment Officer, DOSH, and CPHO

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	<ul style="list-style-type: none"> - Fire; - Other emergent events 	<p>(laboratories, isolation / quarantine areas, PoE, BTSC and hospitals)</p> <p>NB: Site sub-project ESMPs shall update the HCF Emergency Response Plan to adequately address potential hazards including but not limited to man-made (spills, accidental releases, loss of energy supply) and flood / storm where necessary.</p>	
Mortuary arrangements	<ul style="list-style-type: none"> - Arrangements are insufficient - Processes are insufficient - 	<ul style="list-style-type: none"> ➤ Implement good infection control practices such as PPE use with at least disposal gown with long sleeves, water proof apron, disposable, non-sterile gloves, surgical masks, eye protection, rubber gloves and boots. , dead body remains should not be sprayed, washed or embalmed. (see <u>WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19</u>) ➤ Use mortuaries and body bags, together with appropriate safeguards during funerals (see <u>WHO Practical considerations and recommendations for religious leaders and faith-based communities in the context of COVID-19</u>) 	MoH Environment Officer, DOSH, MS and CPHO
HCF operation - Infection control and waste management plan	<ul style="list-style-type: none"> - Stigma 	<ul style="list-style-type: none"> ➤ Ensure accurate information on the diseases, its spread, symptoms and outcomes is broadly distributed to communities using channels that are accessible; ➤ Handle all people directly affected with dignity (those in hospitals, quarantine/isolation centers and the dead); ➤ Strengthen psychological support for ETCs (for confirmed, suspected, and discharged cases) and assistance with hygiene kits for all discharged and cured patients; and ➤ Support affected households to anticipate management of behavioral problems, which can generate tensions and resistance in the community. 	MoH, MS, Lab Managers, and CPHO
	<ul style="list-style-type: none"> - Safe and Dignified Burials (SDBs) - 	<ul style="list-style-type: none"> ➤ Ensure local communities are satisfactorily sensitized and are aware of SDB and its importance; ➤ Adhere to WHO and MoH Safe Burial Protocol (see footnote 13 above); on PPE use to safely handle dead bodies, management of dead bodies and surveillance of staff who handle the dead bodies. ➤ Train and pre-position an SDB Team in local communities, preferably adopting a member of the local community on this team and involving the family where possible. ➤ Ensure SDB teams are fully knowledgeable about WHO SDB protocols and associated activities including decontamination and other standard precautions, community involvement and psychosocial support. 	

COVID-19 Response ESMF – ESMP

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
HCF operation - Infection control and waste management plan	- Inadequate logistics or their inefficient management	<ul style="list-style-type: none"> ➤ Standardization of inventory management tools and mechanisms; ➤ Checking needs for medicines, specific inputs and consumables; ➤ Empowering partners to take over the supply of inputs for the activities for which they are responsible; ➤ Independent responsibility of each partner for its activities (logistical support: accommodation, means of communication and IT, transport, etc.); and ➤ Strengthening the package of shared logistics services for efficient response. 	MoH, MS, Lab Managers, and CPHO
Development and dissemination of IEC materials	<ul style="list-style-type: none"> - The reach is insufficient - The language use is deficient - Segments of the community is left out 	<ul style="list-style-type: none"> ➤ Ensure to use information on counties showing the different groups of VMGs/HUTLCs and their communication needs ➤ Translate materials in different languages ➤ Develop and use a tracking tool 	MoH, MS, Lab Managers, MOH Social Specialist and CPHO
Provision of WASH facilities at the facilities and markets	<ul style="list-style-type: none"> - Exposure to the virus - Lack of water and other supplies - Conflict from the community members 	<ul style="list-style-type: none"> ➤ Strategically place the WASH facilities in places that are agreed upon through consultation by the facilities and users ➤ Assign a local focal point to manage the WASH facility ➤ Monitor the use of the WASH facilities 	MoH, MS, Biosafety Officer, and CPHO
Grievance Redress	<ul style="list-style-type: none"> - GBV/SHEA - Worker to worker conflict - Worker-employer conflict 	<ul style="list-style-type: none"> ➤ Implement the GRM for the project ➤ Ensure contractors implement propositioned steps in making the workplace safer ➤ Ensure that all people directly or indirectly affected by the project know about the GRM ➤ Ensure the people in these facilities understand the GBV/SEA/SH referral pathways. ➤ Ensure the people at the center have access to the toll free hotline. ➤ All workers should sign the code of conduct to hold them accountable (see the LMP). 	
	<ul style="list-style-type: none"> - Improper clinical care, isolation of suspected cases and follow-up of survivors 	<ul style="list-style-type: none"> ➤ Improve biosecurity and harmonize care protocols to avoid risk of infections of medical workers and other people; ➤ Build triage centers in referral hospitals or in health facilities according to the dynamics of COVID-19 pandemic; ➤ Set up a management system specific to case management structures under the management of MOH (finance, logistics, administration, etc.); and ➤ Restructure the survivors' follow-up program by fully integrating it into the clinical care. 	MoH, MS, MOH Social Specialist and CPHO

Table 9-4: Environmental and Social Risks and Mitigation Measures during Decommissioning

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Decommissioning of interim HCF	Soil Erosion	Re-vegetating areas promptly	MoH, DOSH, Environment Officer, MS and CPHO
	Air Quality	Selectively removing potential hazardous air pollutants, such as asbestos, from existing infrastructure prior to demolition, Dust suppression techniques should be implemented, such as applying water or non-toxic chemicals to minimize dust from vehicle movements, and PPE, such as dusk masks, should be used where dust levels are excessive.	MoH Environment Officer, DOSH, HCA and CPHO
	Solid Waste (scrap wood and metals, and small concrete spills, office, kitchen, wastes)	Segregate waste at sources, Safely dispose and incinerate all objects/equipment made of porous/ absorbable material (e.g. linen), Surfaces that are intact and can withstand rigorous cleaning may undergo cleaning and disinfection, Waste should be stored securely while awaiting transport to point of disposal to prevent scavenging, and Use NEMA Licensed waste handler to haul away solid wastes,	MoH Environment Officer, DOSH, MS and CPHO
	Hazardous solid waste includes contaminated soils, oily rags, used oil filters and infection wastes.	Segregate waste at sources, Sharp objects and equipment that have been in contact with blood or body fluids should be placed inside puncture resistant waste containers, Waste should be stored securely while awaiting transport to point of disposal to prevent scavenging, and Use NEMA Licensed waste handler to haul away solid wastes,	MoH Environment Officer, DOSH, MS and CPHO
	Waste water Discharges	Segregation of waste water streams to ensure compatibility with selected treatment option (e.g. septic system which can only accept domestic sewage); Meet the pretreatment and monitoring requirements of the sewer treatment system before discharges.	MoH Environment Officer, DOSH, MS and CPHO.
	OSH Risks	Red zone cleaners should wear FULL PPE according to WHO recommendations, All environmental surfaces (including furniture, walls, doors, etc.) or objects should be cleaned with water and a detergent and then disinfected using a 0.5% chlorine solution,	MoH Environment Officer, DOSH, MS and CPHO.

COVID-19 Response ESMF – ESMP

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		<p>Fence off to avoid unpermitted access</p> <p>Disinfect the working area</p> <p>Workers should wear appropriate PPE, which includes protective outerwear, heavy-duty gloves, boots, goggles or a face shield, and a mask;</p> <p>Perform hand hygiene frequently;</p> <p>Avoid touching their eyes, nose or mouth with unwashed hands, and</p> <p>Practice social distancing while working.</p>	
	Waste water infection	Spills or waste including blood, other body fluids, secretions or excretions should be removed, and cleaned and decontaminated,	MoH Environment Officer, DOSH, MS and CPHO.
	Excreta Materials	A permanent septic tank or latrine that has been used for COVID-19 facility and is less than 2/3 full should be cleaned and decontaminated with 0.5% chlorine. The pit of the septic tank should be treated with lime.	MoH Environment Officer, DOSH, HCA and CPHO.
Decommissioning of medical equipment		<p>Creation of a well demarcated “clean” zone</p> <p>Disinfect the medical equipment</p> <p>Carry out process of dismantling in different areas of the facility simultaneously,</p> <p>No equipment or material should be abandoned on site without the approval of the relevant regulatory authorities and affected landholders.</p> <p>Seek approval of clean site from CPHO, NEMA and consent of the land owner.</p>	MoH Environment Officer, DOSH, MS and CPHO.

MS: Medical Superintendent, BTSC-D –Blood Transfusion Service Center: Director, NEMA-CD: NEMA County Director, CPHO: County Public Health Officer, DOSH: Director Occupational Safety & Health, LM: Laboratory Manager.

Annex III: Infection Control and Waste Management Plan (ICWMP)

Annex IV: Chance Find Procedures

Chance find procedures will be used as follows:

- a. Encounter or detection of a PCR
- b. Stop the construction activities in the area of the chance find;
- c. Delineate the discovered site or area;
- d. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Directorate of Antiquities Sites and Monuments, National Museums of Kenya, take over;
- e. Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Directorate of Antiquities Sites and Monuments (within 24 hours or less);
- f. The Directorate of Antiquities Sites and Monuments would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Directorate of Antiquities Sites and Monuments (within 24 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- g. Decisions on how to handle the finding shall be taken by the Directorate of Antiquities Sites and Monuments. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- h. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Directorate of Antiquities Sites and Monuments; and
- i. These procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed;
- j. Construction work will resume only after authorization is given by the responsible local authorities and the National Museum concerning the safeguard of the heritage; and
- k. Relevant findings will be recorded in World Bank Implementation Supervision Reports (ISRs), and Implementation Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Annex V: Resource List: COVID-19 Guidance

Given the COVID-19 situation is rapidly evolving, a version of this resource list will be regularly updated and made available on the World Bank COVID-19 operations intranet page (<http://covidoperations/>).

WHO Guidance

Advice for the public

- WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

Technical guidance

- Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected, issued on March 19, 2020
- Recommendations to Member States to Improve Hygiene Practices, issued on April 1, 2020
- Severe Acute Respiratory Infections Treatment Center, issued on March 28, 2020
- Infection prevention and control at health care facilities (with a focus on settings with limited resources), issued in 2018
- Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19), issued on March 18, 2020
- Laboratory Biosafety Manual, 3rd edition, issued in 2014
- Laboratory testing for COVID-19, including specimen collection and shipment, issued on March 19, 2020
- Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios, issued on March 21, 2020
- Infection Prevention and Control for the safe management of a dead body in the context of COVID-19, issued on March 24, 2020
- Key considerations for repatriation and quarantine of travelers in relation to the outbreak COVID-19, issued on February 11, 2020
- Preparedness, prevention and control of COVID-19 for refugees and migrants in non-camp settings, issued on April 17, 2020
- Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, issued on March 18, 2020
- Oxygen sources and distribution for COVID-19 treatment centers, issued on April 4, 2020
- Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response, issued on March 16, 2020
- Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19), issued on March 19, 2020
- Operational considerations for case management of COVID-19 in health facility and community, issued on March 19, 2020
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19), issued on February 27, 2020
- Getting your workplace ready for COVID-19, issued on March 19, 2020
- Water, sanitation, hygiene and waste management for COVID-19, issued on March 19, 2020
- Safe management of wastes from health-care activities, issued in 2014

- Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak, issued on March 19, 2020
- Disability Considerations during the COVID-19 outbreak, issued on March 26, 2020

WORLD BANK GROUP GUIDANCE

- Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, issued on March 20, 2020
- Technical Note: Use of Military Forces to Assist in COVID-19 Operations, issued on March 25, 2020
- ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects, issued on April 7, 2020
- Technical Note on SEA/H for HNP COVID Response Operations, issued in March 2020
- Interim Advice for IFC Clients on Preventing and Managing Health Risks of COVID-19 in the Workplace, issued on April 6, 2020
- Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19, issued on April 6, 2020
- IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic, issued on April 6, 2020
- WBG EHS Guidelines for Healthcare Facilities, issued on April 30, 2020

ILO GUIDANCE

- ILO Standards and COVID-19 FAQ, issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

MFI GUIDANCE

- ADB Managing Infectious Medical Waste during the COVID-19 Pandemic
- IDB Invest Guidance for Infrastructure Projects on COVID-19: A Rapid Risk Profile and Decision Framework
- KfW DEG COVID-19 Guidance for employers, issued on March 31, 2020
- CDC Group COVID-19 Guidance for Employers, issued on March 23, 2020

UNDP/UNEP GUIDANCE

Sustainable Development Goals <https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>

UNEP Compendium of Waste Management Technologies

https://wedocs.unep.org/bitstream/handle/20.500.11822/8628/IETC_Compendium_Technologies_Treatment_Destruction_Healthcare_Waste.pdf?sequence=3&isAllowed=y

Ministry of Health

<https://www.health.go.ke/wp-content/uploads/2020/03/COVID-19-Plan-Prevention-and-Control-in-Communities.pdf>

https://www.health.go.ke/wp-content/uploads/2020/04/Kenya-IPC_Considerations_For-Health-Care-Settings-1.pdf

Annex VI: MoH Principles of IPC strategies associated with health care for suspected COVID-19 infection

To achieve the highest level of effectiveness in the response to a COVID-19 outbreak using the strategies and practices recommended in this document, an IPC program with a dedicated and trained team, or at least an IPC focal point, should be in place and supported by national and facility senior management. In facilities where IPC is limited or nonexistent, it is critical to start by ensuring that at least minimum requirements for IPC are in place as soon as possible.

IPC strategies to prevent or limit transmission in health care settings include the following:

1. Ensuring **triage, early recognition**, and source control (isolating patients with suspected COVID infection)
2. Applying **standard precautions** for all patients
3. Implementing empiric **additional precautions** (droplet and contact and, whenever applicable, airborne precautions) for suspected cases of COVID-19 infection
4. Implementing **administrative controls**
5. Using **environmental and engineering** controls

1. Ensuring triage, early recognition, and source control

Clinical triage includes a system for assessing all patients to allow early recognition of possible COVID19 infection and immediate isolation of patients with suspected COVID-19 infection in an area separate from other patients (source control).

To facilitate early identification of cases of suspected COVID-19 infection, health care facilities should:

- Encourage HCWs to have a high level of clinical suspicion;
- Establish a well-equipped triage station at the entrance of health care facility, supported by trained staff;
- Institute the use of screening according to the updated case definition and
- Post signs in public areas reminding symptomatic patients to alert HCWs
- Promote hand hygiene and respiratory hygiene as essential preventive measures

2. Applying standard precautions for all patients

Standard precautions include hand and respiratory hygiene, the use of appropriate PPE according to risk assessment, injection safety practices, safe waste management, proper linens, environmental cleaning and sterilization of patient-care equipment.

Ensure that the following respiratory hygiene measures are used:

- All patients cover their nose and mouth with a tissue or elbow when coughing or sneezing;
- Offer a surgical mask to patients with suspected COVID 19 infection while they are in waiting/public areas or in cohorting rooms;
- Perform hand hygiene after contact with respiratory secretions.

HCWs should apply the WHO's 5 Moments for Hand Hygiene approach before touching a patient, before any clean or aseptic procedure is performed, after exposure to body fluid, after touching a patient, and after touching a patient's surroundings.

- Hand hygiene includes either cleansing hands with an alcohol-based hand rub (ABHR) or with soap and running water;
- Alcohol-based hand rubs are preferred if hands are not visibly soiled;
- Wash hands with soap and water when they are visibly soiled

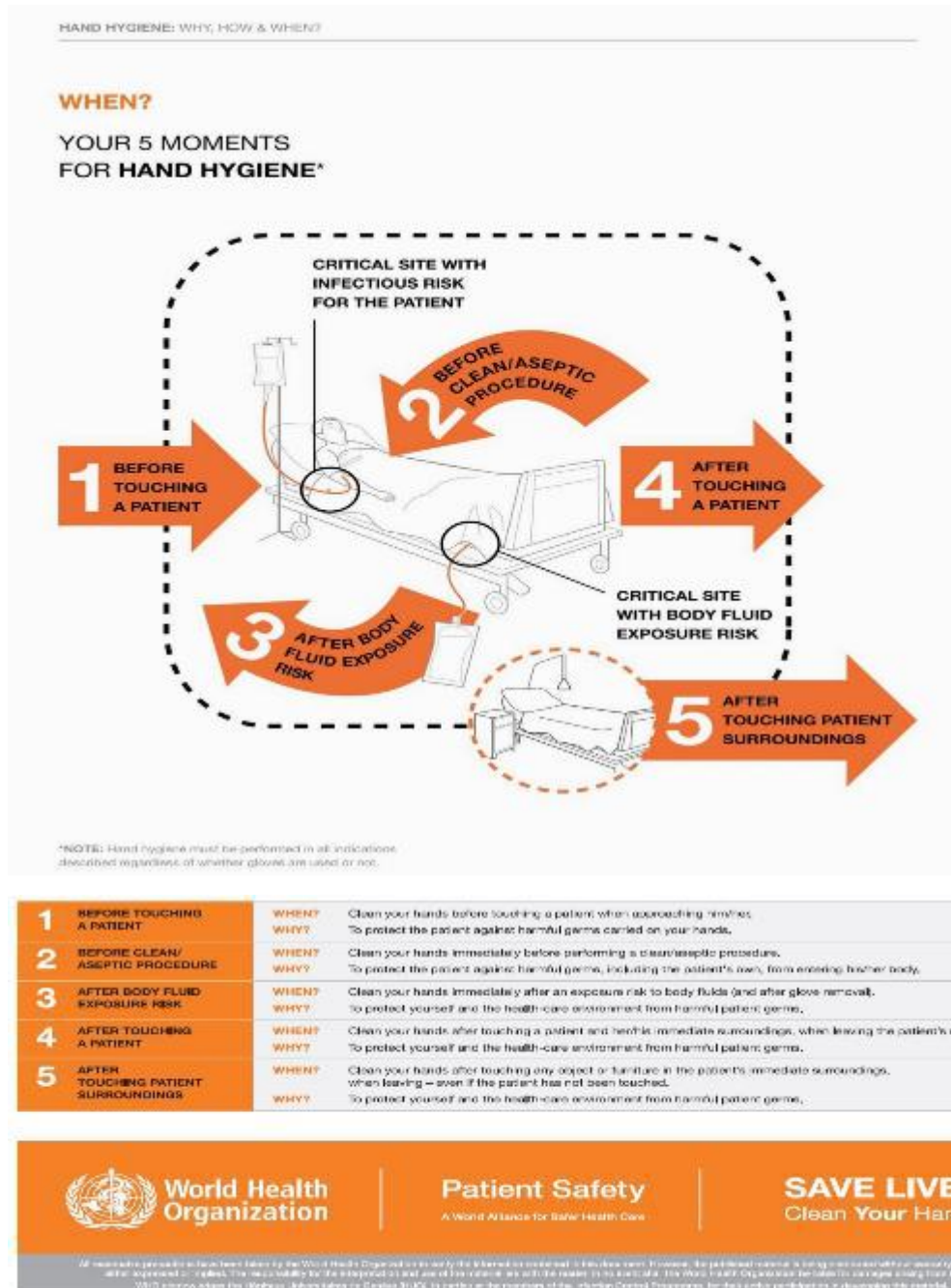


Figure 10- 1: Hand Hygiene why, how and when

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

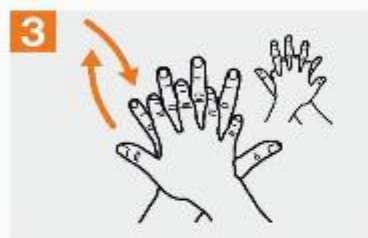
⌚ Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



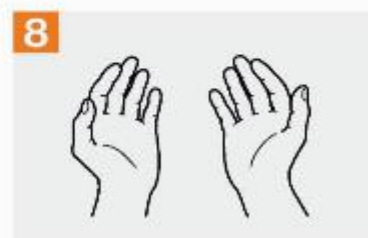
Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.



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SAVE LIVES

Clean Your Hands


Alcohol-based handrub is the preferred method for hand hygiene. However, the alcohol-based handrub is being distributed without warning of any risks it may pose, as it is not a disinfectant. It is responsible for the interpretation and use of the material. For more information, please contact the World Health Organization for advice on the use of hand hygiene products. WHO acknowledges the role of the private sector in the development of the hand hygiene products, in particular the members of the Infection Control Programme for their active participation in developing this material.

May 2020

Figure 10- 2: How to Hand Rub

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 **Duration of the entire procedure: 40-60 seconds**



0 Wet hands with water;



1 Apply enough soap to cover all hand surfaces;



2 Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



4 Palm to palm with fingers interlaced;



5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



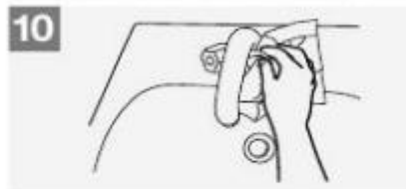
7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



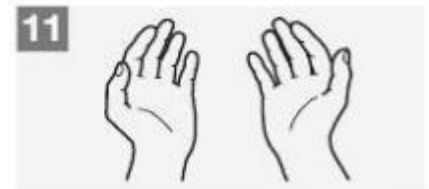
8 Rinse hands with water;



9 Dry hands thoroughly with a single use towel;



10 Use towel to turn off faucet;



11 Your hands are now safe.



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WHO acknowledges the Ministerio de Salud de Chile (MSP), in particular the members of the Infection Control Programme, for their active participation in developing this material.

Figure 10-3: How to Hand Wash

3. Rational Use of PPE

The rational, correct, and consistent use of PPE also helps to reduce the spread of pathogens. The use of PPE effectiveness strongly depends on adequate and regular supplies, adequate staff training, appropriate hand hygiene and specifically appropriate human behavior.

It is important to ensure that environmental cleaning and disinfection procedures are followed consistently and correctly. Thoroughly cleaning environmental surfaces with water and detergent and applying commonly used hospital-level disinfectants (such as sodium hypochlorite) are effective and sufficient procedures. Medical devices and equipment, laundry, food service utensils and medical waste should be managed in accordance with safe routine procedures.



Figure 10- 4: Sequence for Putting Personal Protective Equipment

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

- 1. GLOVES**
 - Outside of gloves are contaminated!
 - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
 - Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
 - Hold removed glove in gloved hand
 - Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
 - Discard gloves in a waste container
- 2. GOGGLES OR FACE SHIELD**
 - Outside of goggles or face shield are contaminated!
 - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
 - Remove goggles or face shield from the back by lifting head band or ear pieces
 - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container
- 3. GOWN**
 - Gown front and sleeves are contaminated!
 - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
 - Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
 - Pull gown away from neck and shoulders, touching inside of gown only
 - Turn gown inside out
 - Fold or roll into a bundle and discard in a waste container
- 4. MASK OR RESPIRATOR**
 - Front of mask/respirator is contaminated — DO NOT TOUCH!
 - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
 - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
 - Discard in a waste container
- 5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**


PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



Figure 10-5: How to Safely Remove Personal Protective Equipment

4. Implementing empiric additional precautions

4.1 Contact and droplet precautions

- In addition to using standard precautions, all individuals, including family members, visitors and HCWs, should use contact and droplet precautions before entering the room where suspected or confirmed COVID-19 patients are admitted;
- Patients should be placed in adequately ventilated single rooms. For general ward rooms with natural ventilation, adequate ventilation is considered to be adequate
- When single rooms are not available, patients suspected of being infected with COVID-19 should be grouped together;
- All patients' beds should be placed at least 1 m apart regardless of whether they are suspected to have COVID-19 infection;
- Where possible, a team of HCWs should be designated to care exclusively for suspected or confirmed cases to reduce the risk of transmission;
- HCWs should use an N95 mask
- HCWs should wear eye protection (goggles) or facial protection (face shield) to avoid contamination of mucous membranes;
- HCWs should wear a clean, non-sterile, long-sleeved gown;
- HCWs should also use gloves;
- The use of boots, coverall and apron is not required during routine care;
- After patient care, appropriate doffing and disposal of all PPE's and hand hygiene should be carried out. Please note that a new set of PPE's is needed, when care is given to a different patient;
- Equipment should be either single-use or disposable or dedicated equipment (e.g., stethoscopes, blood pressure cuffs and thermometers).

If equipment needs to be shared among patients, clean and disinfect it between use for each individual patient (e.g., by using ethyl alcohol 70%).
- HCWs should refrain from touching eyes, nose or mouth with potentially contaminated gloved or bare hands;
- Avoid moving and transporting patients out of their room or area unless medically necessary. Use designated portable X-ray equipment and/or other designated diagnostic equipment. If transport is required, use predetermined transport routes to minimize exposure for staff, other patients and visitors, and have the patient using a medical mask;
- Ensure that HCWs who are transporting patients perform hand hygiene and wear appropriate PPE as described in this section;
- Notify the area receiving the patient of any necessary precautions as early as possible before the patient's arrival;
- Routinely clean and disinfect surfaces which the patient is in contact;
- Limit the number of HCWs, family members and visitors who are in contact with a suspected and confirmed COVID-19 patient;

- Maintain a record (name and contacts) of all persons entering the patient's room, including all staff and visitors.

4.2 Airborne precautions for aerosol-generating procedures

Some aerosol-generating procedures have been associated with an increased risk of transmission of coronaviruses (SARS-CoV and MERS-CoV), such as tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy.

Ensure that HCWs performing aerosol-generating procedures:

- Perform procedures in an adequately ventilated room – that is, natural ventilation with air flow of at least 160 L/s per patient or in negative pressure rooms with at least 12 air changes per hour (ACH) and controlled direction of air flow when using mechanical ventilation;
- Use a particulate respirator at least as protective as a US National Institute for Occupational Safety and Health (NIOSH)-certified N95, European Union (EU) standard FFP2, or equivalent. When HCWs put on a disposable particulate respirator, they must always perform the seal check. Note that if the wearer has facial hair (i.e., a beard) it may prevent a proper respirator fit;
- Use eye protection (i.e., goggles or a face shield); wear a clean, non-sterile, long-sleeved gown and gloves. If gowns are not fluid resistant, HCWs should use a waterproof apron for procedures expected to have high volumes of fluid that might penetrate the gown;
- Limit the number of persons present in the room to the absolute minimum required for the patient's care and support.

5. Implementing administrative controls

Administrative controls and policies for the prevention and control of transmission of COVID-19 infections within the health care setting include, but may not be limited to: establishing sustainable IPC infrastructures and activities; educating patients' caregivers; developing policies on the early recognition of acute respiratory infection potentially caused by COVID 19; ensuring access to prompt laboratory testing for identification of the etiologic agent; preventing overcrowding, especially in the emergency department; providing dedicated waiting areas for symptomatic patients; appropriately isolating hospitalized patients; ensuring adequate supplies of PPE; ensure the adherence of IPC policies and procedures for all facets of health care.

5.1. Administrative measures related to HCWs

- Provision of adequate training for HCWs;
- Ensuring an adequate patient-to-staff ratio;
- Establishing a surveillance process for acute respiratory infections potentially caused by COVID-19 among HCWs;
- Ensuring that HCWs and the public understand the importance of promptly seeking medical care;
- Monitoring HCW compliance with standard precautions and providing mechanisms for improvement as needed.
- Workflow processes should be adjusted to ensure rapid triaging and separation of suspected COVID-19 patients.

6. Using environmental and engineering controls

These controls address the basic infrastructure of the health care facility. These controls aim to ensure there is adequate ventilation in all areas in the health care facility, as well as adequate environmental cleaning.

Additionally, spatial separation of at least 1 meter should be maintained between all patients. Both spatial separation and adequate ventilation can help reduce the spread of many pathogens in the health care setting.

Ensure that cleaning and disinfection procedures are followed consistently and correctly. Cleaning environmental surfaces with water and detergent and applying commonly used hospital disinfectants (such as sodium hypochlorite) is an effective and sufficient procedure. Manage laundry, food service utensils and medical waste in accordance with safe routine procedures.

Annex VII: COVID 19 HEALTH EMERGENCY RESPONSE PROJECT MINUTES FOR CONSULTATION



MINISTRY OF HEALTH

COVID 19 HEALTH EMERGENCY RESPONSE PROJECT(C-HERP)

Public Consultation on Draft Environmental and Social Management Framework (ESMF) and Infection Control and Waste Management Plan (ICWMP) Meeting held on Thursday 18th June 2020 Virtual on Webex.

In Attendance:

- Dr. Anne Ng'ang'a- CHERP Project Manager
- Dr. Jamlick Karumbi- CHERP Assistant Project Manager.
- Lolem Bosco- CHERP Environmental Safeguard
- Emily Kimosop- CHERP Social Safeguard
- Jacqueline A Ressa- CHERP Social Safeguard
- Catherine Ahonge- CHERP PMT
- Evalyne Chagina- CHERP PMT
- Nancy Okwengu- CHERP PMT
- Charity Kabuga- CHERP PMT
- Mary Nyamongo -Social Safeguards Consultant World Bank
- Diana Jemutai- Environmental Specialist Consultant World Bank
- Catherine Ndiso-MOH-THS –UCP Environmental Safeguards
- Margaret Gitau- Social Safeguards THS-UCP
- Lucy Nyambura THS- UCP Mombasa County
- Ratemo Sammy Kinara- Environmental Consultant World Bank
- Dr.Yaron Wolman-DPHK Chairperson
- Sandra Erickson-DPHK Secretariat
- Winnie Mwasiagi- State Department of Social Services
- Solomon Nzioka- Env't Specialist WHO Kenya Country Office.
- Carolyn Munyua- National Gender & Equality Commission
- Winfred Mutindi- National Gender & Equality Commission
- Michelle Sigala- MOH Port Health Services
- Hellen Apiyo- Ministry of Labour
- Kipruto Chesang-CDC
- Vincent Kutai- Global Affairs, Canada
- Isaac Simiyu- National Council For People with Disabilities
- Samburu Wa Shiko- Independent Consultant
- Arunda- County PHO Migori County
- Peterson Wamae- Rep. Director Public Health & Sanitation Kiambu
- David Lagat- MTRH
- Linus Ndegwa- Infection Control CDC
- Maureen Mwadime- Kenya Human Rights Commission
- Mwanzia Joachim
- James Ngocho

COVID-19 Response ESMF – ESMP

- Chwaya Francis - NEMA
- Faiza

Agenda and program:**Moderator: Dr. Jamlick Karumbi**

AGENDA	TIME	PRESENTER
Welcome and Introduction of C-HERP Project	10.00-10.10 AM	Dr. Anne Ng'ang'a CHERP Project Manager
Remarks from The World Bank	10.10-10.15 AM	Diana Jemutai - Environment Safeguard specialist
Overview of ESMF/ ICWMP	10.15- 10.45 AM	Lolem Bosco- Environmental Safeguard. Emily Kimosop- Social Safeguard.
Feedback from Partners Representatives 1. Environment partners 2. Social Protection 3. DPHK representative	10.45-11.15AM	NEMA Director General Winnie Mwasiagi- Deputy Director for Social Development, State Department of Social Protection. Dr. Yaron Wolman, UNICEF Chief of Health and Chair of DPHK
Plenary/ Q & A and Discussion Session	11.15- 12.00PM	Dr. Jamlick Karumbi
Closing Remarks		Dr. Anne Ng'ang'a

Agenda 1: Welcome and Introduction of C-HERP Project- Dr. Ng'ang'a.

The Meeting began with a welcome and introduction to the CHERP project by the Project Manager. Project components, key indicators and overview of ESMF/ICWMP were highlighted. The importance of assessment and mitigation potential environmental and social risks of the project and public disclosure as required for World Bank funded projects was emphasized.

Agenda 2: Remarks from the World Bank- Diana Jemutai

The Project has been prepared under the new World Bank Environment and Social Framework which has ten Environment and Social Standards. ESS 10 is on Stakeholder Engagement and Information Disclosure. The Bank recognizes the importance of open and transparent engagement with stakeholders which improves on environment and social sustainability of projects through contribution to improved project design and implementation. The World Bank is keen on meaningful stakeholder engagement and identification of inclusive risks and impacts which are well mitigated. To achieve this, the Bank encourages project disclosure so that stakeholders can contribute to the adequacy and appropriate mitigation measures. Stakeholders were encouraged to use the tool shared by MOH to share inputs for documentation and enhancement of the ESMF and ICWMP.

Agenda 3: Overview of ESMF/ ICWMP- Sammy, Lolem, Emily

An overview of ESMF (Sammy), ICWMP (Lolem) and social aspects of ESMF (Emily) was presented to the Stakeholders. Presentations will be shared.

Agenda 4: Feedback from Partners Representatives

1. Winnie Mwasiaji- Deputy Director for Social Development, State Department of Social Protection.

- The ESMF document has addressed a number of environment and health risks in detail but social and gender issues not articulated clearly. However, even with the environment and health issues, some elements of social and gender were highlighted.
- Currently GBV is rampant, there are many early pregnancies been registered due to the COVID 19 closure of schools.
- DOSHS is impressed with human aspects in the project, many project have been catering for the environment issues mainly and leave out social related issues. The concept of using GRM mechanism to get community feedback to the project.
- Consider the impact of isolation and containment measures on behavioral change- The behavioral change associated with COVID 19 may have impact in future, for example no shaking of hands, make people feel loneliness as there is no social touch, there is need to appreciate the cultural aspects within the benefiting / host communities.
- GRM mechanisms are welcome to monitor impact in host communities.
- Engagements of host communities- consider power dynamics, gender inclusive employment in host communities.
- The State Department of Social Protection is developing a risk management framework which will be key in mitigating social risks across projects. It will address compliance and penalties when due process is not followed.

2. Dr. Yaron Wolman, UNICEF Chief of Health and Chairperson- Development Partners for Health in Kenya.

- COVID 19 outbreak provides an opportunity for programs to re-look critically into their policies and project on how they impact of the environment and propose adequate mitigation measures.
- Special appreciation for the World Bank for funding this project timely to respond to the COVID-19 pandemic for the timely in support to the health care facilities in the procurement of specialized medical equipment for the laboratories, blood service centers, isolation, quarantine areas and hospital including the provision of personal protective equipment, these however have a potential negative impacts that need mitigation in early stages.
- Evaluation of the social implication of the current crisis from the early stages of the COVID-19 pandemic is critical, for example Ebola had a very great impact of community social cohesion ties for the communities. This will ensure that communities, healthcare workers, community members and biodiversity are not affected during project implementation.
- Robust monitoring mechanisms to mitigate the residual impact that persists even after implementation of initial mitigation measures will be essential in ensuring environmental and social standards are adhered to.
- The DPHK continues to stand in solidarity with the Government of Kenya and the people of Kenya in the handling of the COVID-19 pandemic.

Agenda 5: Feedback from Partners Representatives (plenary)

3. Winfred Wambua- National Gender and Equality Commission

- There is need to consider having a project committee which involve members of the community taking into consideration gender, age, disability considerations, also for children issues, i.e. the community always has the best interest of the children.
- There is need to have a robust Gender based Violence and Sexual exploitation and Abuse Action Plan to handle the GBV/SEA risks in relation to employment of women and work related sexual harassment.
- Can the project be extended to the prison, the status of health care services within the prison is wanting? This project can be used to improve service provision in the prison.

4. Isaac Manyonge- National Council For People with Disabilities

- Persons with Disabilities needs in relation to Environment and Social Aspect has been completely been left out. The Legislative Policy and Legal Framework, Persons with Disability Act No. 14 of 2003 should be included as a guiding document. Since Accessibility to Enrolment, Information, Service Provision and Employment is a key requirement, it's my humble request that we deliberately provide for Persons with Disabilities as a Cross Cutting Requirement across the entire programme.
- The mainstreaming of PWD component should be included as cross-cutting issue in all levels of government including National level, failure to mainstream at the National Level will be replicated at the lower levels as well.
- The project should ensure inclusion of PWD not only accessing the constructed and renovated healthcare facilities RAM, PWD should access services i.e. abolition, sanitary facilities and employment as well.
- What indicators will be in place to monitor PWD inclusion and mainstreaming, This includes training aspects of the response.

5. Maureen Mwadime- Kenya National Commission on Human Rights.

- The component of decommissioning the quarantine facilities (especially schools) is a welcome component so that community using the school (pupils, students, teachers and service providers) has confidence that the facilities are well decontaminated. The decommissioning checklist should be made assessable to the community members and any other interested parties. Information sharing should be clearly outlined to ensure access by key stakeholders.
- The project should use multi-stakeholder GRM for example at national, county and ward levels. This will enable timely resolution of the disputes before being escalated to the higher levels as well offer adequate time for project implementation.
- There are a number of action plans developed for the project, there should be a deliberate action plan targeting working with specific entities like Gender and equality Commission, Ministry of Water and Sanitation, Kenya national Human Rights Commission among others.
- There is need to have a targeted inclusivity in the framework with focus on the marginalized groups as well as how to engage the vulnerable communities including the youth, women and

PWD. This is due to the norm that always men are involved in project implementation than women.

- There is also a need to involve the host community in terms of how can they participate and be part and parcel of the project.
- Right to health in prisons is wanting- consider inclusion of human rights issues in prison facilities.

6. Arunda- County Public Health Officer for Migori County

- There is a need for the project to use the existing structures within the Ministry of Health especially at community levels; this will leverage the existing platform save resources as well as ensure maximum output from the project.
- There is need to ensure all isolation and quarantine facilities are disinfected and decontaminated to minimize the stigma associated with such facility in future.

The meeting was concluded with closing remarks from Dr. Ng'ang'a. She thanked the Stakeholders for their participation in the enrichment of the ESMF and ICWMP. The safeguards team will continue to receive and review further comments and feedback through the feedback forms shared through email. There being no further comments the meeting was closed at 12.30PM.

Prepared by- Evalyne Chagina