

ENVIRONMENT AND SOCIAL MANAGEMENT FRAMEWORK
FOR
COVID-19 EMERGENCY RESPONSE AND HEALTH SYSTEMS
PREPAREDNESS PROJECT

MINISTRY OF HEALTH
THE ROYAL GOVERNMENT OF BHUTAN

MAY 2020

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Introduction

This *Environmental and Social Management Framework* (ESMF) assists the Royal Government of Bhutan (RGB) in identifying the type of environmental and social assessment that should be carried out for the *COVID-19 Emergency Response and Health Systems Preparedness Project under the COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA)*, that involves enhancement of disease detection capacities through provision of technical expertise, laboratory equipment and systems; information and communication activities to raise awareness, knowledge and understanding among the general population; support the strengthening of the MoH structures and agencies for the coordination and management of the COVID-19 response and a Contingent Emergency Response Component.

For the Bhutan COVID-19 Emergency Response and Pandemic Preparedness Project, specific project locations and the specific sub-projects (including sub-project sites and design) are yet to be identified, hence a *framework approach* has been adopted through the development of this Environmental and Social Management Framework (ESMF). The *framework* for carrying out ES assessment of sub-projects to be implemented under the project has been prepared based on an *overall ES assessment* of the preliminary selected sub-projects areas. This Environmental and Social Management Framework (ESMF) is an integral part of the project E&S management instruments.

This ESMF illustrates policies, procedures and directives on how to assess specific ES risks and provide guidance to mitigate them. The ESMF also provides guidelines for screening sub-projects for ES risks by the implementing agency. During implementation, site-specific ES assessments will be carried out in accordance with this ESMF and ESMPs will be prepared and implemented prior to the commencement of the specific works. The site specific assessments will help adoption of mitigation measures against the ES risk and impacts (through preparation of ESMP, Template at Annex III) and to address the issues of inclusion, social vulnerability of certain groups, gender and GBV, consultation and communication strategy and any other issues identified via the assessment and the stakeholder consultations.

The main purposes of this ESMF are to:

- Provide tools and guidelines for environmental and social (ES) risk categorization of all the sub-projects to be implemented under the project for which detail information are not available at this stage
- Set out the detailed procedures to be followed for various sub-project categories to assess and manage ES risks
- Consider in an integrated manner, the potential ES risks, benefits and impacts of the project and help identify measures to avoid, minimize and manage risks and impacts while enhancing benefits
- Ensure all relevant ES issues are mainstreamed into the design and implementation of the sub-projects
- Provide guidance for preparation of various Environmental and Social Framework (ESF) related instruments
- Provide guidance for ensuring stakeholder engagement at various stages of sub-project implementation.

Once details of the project sites/ subprojects are available at later stages of the project, the need for and type of ES assessments and management plans, will be reviewed, according to World Bank (WB) policies and Royal Government of Bhutan legislation.

This ESMF includes templates for the *Environmental and Social Management Plan* (ESMP) (Annex III) and the *Infection Control and Waste Management Plan* (ICWMP) (Annex IV). The ESMP template identifies potential environmental, social, health and safety issues associated with the construction and operation of healthcare facilities in response to COVID-19. The ICWMP template focuses on infection control and healthcare waste management practices during the operation of healthcare facilities. The ESMP and ICWMP should set out appropriate measures for infection control and waste management during operation of the relevant healthcare facilities.

For the Bhutan COVID-19 project, an Environment and Social Commitment Plan (ESCP) detailing material measures and action for the Borrower's to adopt, Stakeholder Engagement Plan (SEP) to illustrate engagement procedure and provision of grievance redress mechanism and a Labor Management Procedure (LMP) to address issues with project workers have already been prepared and will be disclosed with ESMF.

1. BACKGROUND

An outbreak of the coronavirus disease (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province, China. Since the beginning of March 2020, the number of cases outside China has increased thirteenfold and the number of affected countries has tripled. On March 11, 2020, the World Health Organization (WHO) declared a global pandemic as the coronavirus rapidly spreads across the world. As of May 19, 2020, the outbreak has resulted in an estimated 5 million cases and 320,000 deaths in almost all the countries of the world.

COVID-19 is one of several emerging infectious diseases (EID) outbreaks in recent decades that have emerged from animals in contact with humans, resulting in major outbreaks with significant public health and economic impacts. The last moderately severe influenza pandemics were in 1957 and 1968; each killed more than a million people around the world. Although countries are now far more prepared than in the past, the world is also far more interconnected, and many more people today have behavior risk factors such as tobacco use and pre-existing chronic health problems that make viral respiratory infections particularly dangerous. With COVID-19, scientists are still trying to understand the full picture of the disease symptoms and severity. Reported symptoms in patients have varied from mild to severe, and can include fever, cough and shortness of breath. In general, studies of hospitalized patients have found that about 83 percent to 98 percent of patients develop a fever, 76 percent to 82 percent develop a dry cough and 11 percent to 44 percent develop fatigue or muscle aches. Other symptoms, including headache, sore throat, abdominal pain, and diarrhea, have been reported, but are less common. While 3.7 percent of the people worldwide confirmed as having been infected have died, WHO has been careful not to describe that as a mortality rate or death rate. This is because in an unfolding epidemic it can be misleading to look simply at the estimate of deaths divided by cases so far. Hence, given that the actual prevalence of COVID-19 infection remains unknown in most countries, it poses unparalleled challenges with respect to global containment and mitigation. These issues reinforce the need to strengthen the response to COVID-19 across all IDA/IBRD countries to minimize the global risk and impact posed by this disease.

The COVID-19 pandemic has had an immediate impact on Bhutan. A global slowdown in growth and severe travel restrictions are affecting Bhutan's economy through a sharp drop in tourism, which has been the secondary driver of growth in the country after hydropower. Bhutan is furthermore impacted through reduced demand for its (non-hydro) exports and import disruptions. In addition to reducing economic activity, these developments are expected to reduce public revenue collection, affect the prices of imported goods and increase public expenditure.

Bhutan is highly vulnerable to health and other hazards. Climate variability and change are linked to the emergence and re-emergence of infectious diseases including disease incidence, transmission, and outbreaks. Variations in climate, coupled with a sub-optimal disease surveillance system, porous border with India, frequent exchange of poultry products from across its borders, can also establish the environmental conditions ripe for outbreaks.

On March 6, 2020, Bhutan announced its first confirmed COVID-19 (coronavirus) case and as of May 19, there are 21 confirmed cases, with no fatalities. Given the importance of COVID-19 and the potential difficulties in preventing and controlling both spread of this outbreak and the economic and social impact on the population, the Royal Government of Bhutan (RBOB) is aware of the urgent need to mount an effective and immediate response to COVID-19. As a first step, a National Preparedness and Response Plan (NPRP) for COVID-19 was developed on January 21, 2020 by the Ministry of Health. The NPRP is aligned with the BPPRP, HEDCP and DMA. The objective of NPRP is to enhance the health sector's capacity to enhance surveillance, detect, control and prevent, respond, investigate and recover from COVID-19 outbreak in the country. The proposed project will support implementation of immediate urgent aspects of

NPRP to deal with the COVID-19 pandemic.

The Project Development Objective (PDO) is *to prevent, detect and respond to the threat posed by COVID-19 and to strengthen national systems for public health preparedness in Bhutan.*

The project will i) support enhancement of disease detection capacities through provision of technical expertise and laboratory equipment, ii) assist health care system for preparedness planning to provide optimal medical care, maintain essential community services and to minimize risks for patients and health personnel, iii) support information and communication activities to raise awareness, knowledge and understanding among the general population about the risk and potential impact of the pandemic and iv) support the strengthening of the MoH structures and agencies for the coordination and management of the COVID-19 response. This project is prepared under the global framework of the World Bank COVID-19 Response financed under the Fast Track COVID-19 Facility (FCTF).

2. PROJECT DESCRIPTION

The proposed project will support implementation of immediate urgent aspects of the government strategies to deal with the COVID-19 pandemic, namely the NPRP for COVID-19. The project comprises 4 components:

Component 1: Emergency COVID-19 Response (US\$4.35 million)

This component would provide immediate support to Bhutan to prevent COVID-19 or limiting local transmission through containment strategies. It would support enhancement of disease detection capacities through provision of technical expertise, laboratory equipment and systems to ensure prompt case finding and contact tracing, consistent with WHO guidelines in the Strategic Response Plan. It would enable Bhutan to mobilize surge response capacity through trained and well-equipped frontline health workers.

Subcomponent 1.1: Case Detection, Confirmation, Contact Tracing, Recording, Reporting (US\$1.7 million). This sub-component would help (i) strengthen disease surveillance systems, public health laboratories, and epidemiological capacity for early detection and confirmation of cases; (ii) combine detection of new cases with active contact tracing; (iii) support epidemiological investigation; (iv) strengthen risk assessment, and (v) provide on-time data and information for guiding decision-making and response and mitigation activities. It will strengthen health management information for the Early Warning and Reporting System (EWARS) surveillance network. This sub-component will finance human resource needs at the sentinel sites, training of frontline workers, logistics support, supervision and monitoring, laboratory needs (test kits, real-time/PCR techniques, reagents, specimen collectors), laboratory equipment, and laboratory experts. Key outputs would include ensuring that specimens submitted for SARS-COV2 laboratory testing are confirmed within WHO stipulated standard times and that contact tracing of all confirmed cases are conducted as per the MoH protocol.

Sub-component 1.2: Health System Strengthening (US\$2.65 million). Assistance would be provided to the health care system for preparedness planning to provide optimal medical care, maintain essential community services and to minimize risks for patients and health personnel, including training health facilities staff and front-line workers on risk mitigation measures and providing them with the appropriate protective equipment and hygiene materials. Strengthened clinical care capacity could be achieved through financing the establishment of specialized units in selected hospitals, treatment guidelines, clinical training of health workers and hospital infection control guidelines. Also, strategies would be developed to increase hospital bed availability, including deferring elective procedures, more stringent triage for admission, and earlier discharge with follow-up by home health care personnel. As COVID-19 would place a substantial burden on inpatient and outpatient health care services, support would be provided to rehabilitate and equip selected health care facilities and hospitals for the delivery of critical medical services and to cope with increased demand of services posed by the outbreak, and to develop intra-hospital infection control measures, including necessary improvements in blood transfusion services to ensure the availability of safe blood products. This would include support for intensive care facilities within hospitals with medical equipment. There would be support for ensuring safe water and basic sanitation in health facilities, as well as to strengthen medical waste management and disposal systems, mobilize additional health personnel, training of health personnel, provision of medical supplies, diagnostic reagents, including kits, other operational expenses such as those related to mobilization of health teams. This subcomponent will finance procurement of medical goods and supplies, including those related to health care waste management and minor civil works for establishing emergency medical services including triage facilities on the hospital property.

Component 2: Community Engagement and Risk Communication (US\$0.4 million)

This component will support information and communication activities to raise awareness, knowledge and understanding among the general population about the risk and potential impact of the pandemic, including social distancing measures, health promotion, social mobilization, stakeholder engagement and community engagement. This component will ensure the real-time exchange of information, advice and opinions, through a mix of communication and engagement strategies, such as media and social media communications, mass awareness campaigns including “social distancing” measures, health promotion and social mobilization. This component will be used for supporting MoH on risk communication, setting up virtual learning facilities in district health facilities, including development of various communication materials and dissemination activities. This component will finance contracting firms for behavior change communication efforts, training modules, training on risk communication, printing materials, and symposia for advocacy on surveillance, treatment and prophylaxis.

Component 3: Implementation Management and Monitoring and Evaluation (US\$0.25 million)

This component would support the strengthening of the MoH structures and agencies for the coordination and management of the COVID-19 response, including coordination of project activities, financial management, procurement, social and environmental safeguards- adherence to the Stakeholder Engagement Plan (SEP and the Environment and Social Commitment Plan (ECSP). This component would also support monitoring and evaluation of prevention and preparedness, building capacity for clinical and public health research and joint learning across and within countries. The relevant structures will be strengthened by the recruitment of additional staff/consultants, information technology and communications equipment, workshops and training, research contracts, staff travel and monitoring visits.

Component 4: Contingency Emergency Response Component (CERC) (US\$0)

This component will provide immediate response to an eligible crisis or health emergency.

Based on the Project component it is envisaged that the health facilities will be upgraded necessitating minor civil works and thus will entail the employment of construction workers and suppliers. Present waste management system and existing landfills, incinerators, and wastewater treatment plants will be used. The Project will also finance goods such as medical and laboratory equipment, Personal Protective Equipment (PPE), chemical/biological reagent, and other medical supplies or materials for COVID detection, blood transfusion and other intensive care facilities. All interventions will be carried out within existing hospital premises, so no land acquisition will be acquired. The Project will also not involve trans-boundary movement of specimen, samples or any hazardous materials. The project will not support the enforcement of such measures when they involve actions by the police or the military, or otherwise that require the use of force. As per the assessment of ES risk, both the Environmental and Social risks are categorized as Substantial.

When subproject locations/ design will be known, each subproject will be screened for ES risks and impacts. Annex II provides a screening form (including negative list for CERC) which sets out a list of questions on the screening of ES risks and impacts, identifies the relevant ESSs and the type of assessments and management tools that can be developed.

3. POLICY, LEGAL AND REGULATORY FRAMEWORK

World Bank's ESFs and all national laws, acts, regulations and guidelines of the Royal Government of Bhutan will govern the implementation of the project-related infrastructure and procurement works. Various legal and regulatory requirements of both the Royal Government of Bhutan and WB toward health, communicable diseases, labor, environment, waste management, women etc to address the risk and impact of recent COVID-19 outbreak have been studied and salient features are described below:

Relevant Bhutan Policies and Laws:

Sustainable development is enshrined in the government's **National Environment Strategy for Bhutan 1998**, which aims to maintain a balance between environment and development. **The Environmental Assessment Act 2000**, which requires that all environmental concerns are fully considered prior to the formulation of new projects and it establishes procedures for assessing the potential impacts of plans, policies, programs, and projects. The act mandates that an environmental clearance from a competent authority should be conducted as a pre-requisite for a project.

The environmental clearance procedure is described in the **Regulation for the Environmental Clearance of Projects (2016)**, and specific guidance is given in a series of sectoral guidelines, prepared in 1999 and revised with ADB assistance in 2006. According to the Environment Assessment Act, the proponent is required to submit an environmental clearance application to a designated competent authority wherein all environmental concerns are fully considered and documented.

When developmental projects are in the Thromde (municipality), the project is governed by the **Thromde Act of Bhutan (2007)**, and the **Thromde Rules (2011)** and the designated competent agency to grant development and environment clearance is the Thromde. Where development projects such as construction of Basic Health Units (BHU) in rural areas or where small improvement works within rural health care facilities (HCFs) are proposed, the designated competent authority is the district environmental officer and must abide by **Rural Construction Rules (2013)** for the Ministry of Works and Human Settlement (MWHS).

All construction works within Thimphu city limits must be in line with the **Thimphu Structural Plan (2004)**, **Thimphu Municipal Development Control Regulations (2004)**, and the **Bhutan Building Rules (2002)**, which apply to all urban areas. In rural areas, Rural Construction Rules (2013) apply. These rules dictate the maximum plot sizes and maximum building heights so that aesthetic as well as environmental impacts on neighboring areas are minimized. The MWHS has released the Bhutan Green Building Design Guidelines in 2013 which provides guidance to architects, engineers, and builders on practical green building design and construction principles and solutions that can be adopted in Bhutan. It promotes the use of low energy local construction methods and natural resources coupled with designs that was adapted to respond to local climatic environment combined with vernacular architecture in Bhutan. The **National Health Policy (2011)** provides guidance to the Ministry of Health (MOH) to achieve its national and international health goals as guided by the constitution. The design and minimum requirements for the satellite clinics is guided by the **Bhutan Services Standards (2009)** for BHUs and satellite clinics. Other relevant regulations and standards are the Water Regulation of Bhutan (2014) and the Environmental Standards (2010) that regulate the water and ambient air quality standard.

Under the Thromde Act and Rules, development applications are categorized as major, and those that can be routed through the green channel or those considered as development priority considered as minor. Where development work is undertaken on behalf of the government, by a government agency, the construction clearance for the project can be processed through the "priority channel". Through this channel, the construction approval is granted within 5 working days (excluding the time taken to seek

clearance from the Bhutan Power Corporation for electrical connections) of submission of all the required architectural, structural, electrical, and water supply and sanitation drawings. All government works are guided by the **Procurement Rules and Regulations (2009)**, and therefore procurement of all equipment and construction works will follow government standard bidding processes.

As per the **Disaster Management Act of Bhutan (2013)** to reduce the risks from disaster, the Department of Disaster Management has prepared Dzongkhag Disaster Management Planning Guidelines to guide the Dzongkhags, through the Dzongkhag Disaster Management Committees, to develop and implement a Dzongkhag Contingency Plan. Most Dzongkhags are now undertaking the planning process that includes hazard mapping to identify the most hazard-prone areas of the Dzongkhag so that future development, interventions, and risk mitigation measures can be planned accordingly. A national health emergency and disaster contingency plan has been developed to respond to public health emergencies and disease outbreak. A Health Emergency Operation Centre has been established to ensure effective communication and coordination for emergency response and disaster management.

Bhutan has several acts and rules related to waste management such as the **Waste Prevention and Management Act of Bhutan (2009)** and **Waste Prevention and Management Regulation (2012)** that promote the principles of 3Rs (reduce, reuse, and recycle). The act and regulation discuss waste reduction at the source; promoting segregation, reduction, recycling, and disposal of waste in an environmentally sound manner. The act is enforced through the Waste Prevention and Management Guideline (2012). The National Environment Commission Secretariat (NECS) is responsible for implementing the provisions outlined in the act and the guidelines. According to these guidelines, medical waste is categorized into general, pathological, infectious, sharps, pharmaceutical, chemical, radioactive waste, and pressurized containers.

There are guidelines on pharmaceutical waste issued by the Drug Regulatory Authority (DRA) and endorsed by the National Environment Commission (NEC). The guidelines outline the process for collection, segregation, transportation, storage, disposal, and recording of pharmaceutical waste from HCFs as well as private pharmacies. Further, as per the **Bhutan Medicines Rules and Regulations (2012)**, the firms are mandated to segregate and record the quantity of waste generated from the firm and store them separately until disposal. The sale and distribution of expired medicines is prohibited by the **Medicine Act (2003)**. Since not much waste is generated from the private pharmacies, disposal is only carried out once a year. Non-hazardous waste is managed at individual health facility level and hazardous waste is sent to the medical store in Phuentsholing for disposal. The DRA has a memorandum of understanding with the Penden Cement Authority in Gomtu to be able to incinerate hazardous pharmaceutical waste. In 2004, the MOH set up the National Infection Control and Healthcare Waste Management Program (NICHWMP) to address the need for efficient infection control and waste management as well as build the capacity of the health workers to prevent hospital-acquired infections (HAIs). Each HCF is required to send quarterly and annual compliance reports to the MOH and the MOH in turn is responsible for reporting to the NECS. The responsibility in the MOH for waste management is as follows:

- (i) At the national level, the high-level committee provides technical guidance to the NICHWMP.
- (ii) At regional referral hospitals, there is an infection control team who implement infection control and waste management practices.
- (iii) At the hospitals, there is a committee who implement infection control and waste management practices.
- (iv) At the primary level, each BHU has a health worker who is an infection focal person and is responsible for infection control and waste management practices.

The **Waste Prevention and Management Act of Bhutan (2009)** and Chapter IV of the **Waste Prevention and Management Regulations (2012)** indicates that the municipal authority is responsible for waste management, transport, and disposal at designated sites and for developing public-private partnerships for

waste management. Dumping of any kind of waste is punishable by law, all waste needs to be approved by the Environmental Division of the Thromde who will identify the appropriate disposal site in consultation. The Dzongkhag Tshogdue and Thromde Tshogdu are responsible for waste management in district towns and Dzongkhag. They review and approve waste management facilities, landfill locations, and approve collection of waste management services.

There are **guidelines on Infection Control and Health Care Waste Management** as well as **Guideline for Disposal of Pharmaceutical Waste (2014)**, produced by the DRA, outlines the process for segregation, transportation, storage, disposal, and recording of pharmaceutical waste. **The National Guideline on Infection Prevention and Control and Medical Waste Management for Healthcare Facilities (MOH, 2017)** outlines the types of waste that can be disposed of in the deep burial pit as well as the type of treatment method required prior to disposal such as autoclaving/ chemical disinfection for solid hazardous waste, and autoclaving and shredding for sharps. The guidelines also outline the standards for deep burial pits construction such as minimum distance, siting, depth, and width, which are included in the environmental management plan (EMP).

WB Environment and Social Framework and Standards (ESF/ESS). Since October 01, 2018, all WB funded Investment Project Financing (IPF) are required to follow the Environmental and Social Framework (ESF) consisting ten (10) Environmental and Social Standards (ESS). These ESSs set out their requirement for the borrowers relating to the identification and assessment of ES risks and impacts associated with any project. A brief description of the ten (10) ESSs including their relations with the project are appended below:

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

ESS1 clarifies the borrower's responsibilities in identifying and managing the ES risks of the project. The project will provide health services in response to the global COVID-19 outbreak. Given the nature of how the disease spreads and the medical requirement and resources needed to address the issue, the health-care workers, the community members and the environment are likely to be exposed to health risks from medical, solid and liquid wastes generated from the health facilities (if not properly treated and managed) and the interaction among the potential COVID-19 cases and general public. This ESS illustrates the various ES instruments that will be prepared to address the issues of ES risks and impacts.

ESS10 Stakeholder Engagement and Information Disclosure

This ESS illustrates the need and ways stakeholders will be engaged throughout project preparation and implementation. Ministry of Health (MoH) will engage in meaningful consultations with all stakeholders throughout the project lifecycle, paying special attention to the inclusion of women and vulnerable and disadvantaged groups. The project will address the issue of containment and treatment of COVID-19 which is very infectious, face to face communication and meeting/ gathering/ conferring in a closed place with a significant number of individuals will be avoided. A Stakeholder Engagement Plan (SEP) has already been made to address issues discussed under this ESS.

ESS2 Labor and Working Conditions

This ESS deals with labor related issues. The healthcare providers, staff and relevant workers, those treat coronavirus patients in the hospital are among the most important individuals in the fight against this virus and they may be gotten hit hardest by the virus. Given the nature of the outbreak, safety of healthcare workers is utmost important, and for the greater interest community. The project will include minor repair and renovation work in health facilities, which will require employment of local labor and their number is not expected to be significant. A Labor Management Procedure (LMP) has been

prepared which includes types and number of workers, legal frameworks, nature of their assignment, OHS issues, Grievance Redress Mechanism (GRM) etc.

ESS3 Resource Efficiency and Pollution Prevention and Management

The project is likely to generate a significant amount of medical, solid and liquid wastes. These may affect the health of care givers, local communities and the environment. In line with the guidance of this ESS an Infection Control and Waste Management Plan (ICWMP), (including medical, solid and liquid waste management) will be prepared, per template in Annex IV, to assess and manage waste of different kinds (solid, liquid, medical, hazardous and nonhazardous). The plan will include separation of different kinds of waste, treatment, reuse, recycle and transportation, storage and final disposal of wastes in approved sites/ through incineration/ other methods as per ESS 3 and related ESHGs, GIIP, WHO guidelines and national law.

ESS4 Community Health and Safety

This ESS illustrates the need and requirement for community health and safety issues. Project activities under this project may give rise to a number of risks for community health and safety. The project would support the provision of health services to deter the COVID-19 outbreak through various health facilities. The project will generate both non-hazardous and hazardous waste throughout the renovation and provision of medical service phases. All waste management activities will be guided by this ESS. The Infection Control and Waste Management Plan (ICWMP) will address minimizing exposure to medical waste to the community. Community awareness raising activities and preparedness will be addressed through the Stakeholder Engagement Plan (SEP).

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Land acquisition and resettlement are guided by this ESS. In this project, no land acquisition is envisaged since civil work involved will be refurbishment and rehabilitation of healthcare facilities which will take place within the existing premises/footprints.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This ESS is about risks and impacts of project activities on biodiversity and living natural resources. The project is not likely to adversely affect any biodiversity or living natural resources.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Issues related to indigenous peoples is guided by this ESS. Given the width and breadth of the potential beneficiaries and reach of the project, indigenous peoples present in various locations of the country will come under the umbrella of the project components. No specific direct negative impacts on indigenous peoples are envisaged, and all relevant steps will be taken to communicate COVID-19 related information to these communities in a culturally appropriate manner, taking into consideration their special circumstances and potential for being excluded. The consultation is a two-way process, that: (a) Begins early in the project planning process to gather initial views on the project proposal and inform project design; (b) Encourages stakeholder feedback, particularly as a way of informing project design and engagement by stakeholders in the identification and mitigation of environmental and social risks and impacts; (c) Continues on an ongoing basis, as risks and impacts arise; (d) Is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information in a timeframe that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s) and is understandable to stakeholders; (e) Considers and responds to feedback; (f) Supports active and inclusive engagement with project-affected parties; (g) Is free of external manipulation, interference, coercion, discrimination, and intimidation; and (h) Is documented and disclosed by the Borrower.

ESS8 Cultural Heritage

This project is unlikely to adversely affect any cultural heritage.

ESS9 Financial Intermediaries

The proposed project will not involve any financial intermediaries.

Environment, Health and Safety Guidelines (EHSG). The EHSG are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP) and are referred to in the ESF. The EHSG contain the performance levels and measures that are normally acceptable to the World Bank Group (WBG), and that are generally considered to be achievable in new facilities at reasonable costs by existing technology. The WBG requires borrowers to apply the relevant levels or measures of the EHSG. When host country regulations differ from the levels and measures presented in the EHSG, projects will be required to achieve whichever is more stringent. In the case of the present Project the General EHSG will apply. The Implementing Agency (IA) will pay particular attention to EHS 1.5 Hazardous Materials Management; EHS 2.5 Biological Hazards; EHS 2.7 Personal Protective Equipment (PPE); EHS 2.8 Special Hazard Environments; EHS 3.5 Transportation of Hazardous Materials; and EHS 3.6 Disease Prevention. A separate EHSG on Health Care Facilities will also apply to this Project intervention. It illustrates waste management, air quality and wastewater disposal guidelines related to HCFs.

International Treaties and Conventions. Bhutan is also a signatory to a number of International Conventions and Treaties including Basel Convention for hazardous wastes and disposal.

World Health Organization (WHO) Guidance. The WHO is maintaining a website specific to the COVID-19 pandemic with up-to-date country and technical guidance. As the situation remains fluid it is critical that those managing both the national response as well as specific HCF and programs keep abreast of guidance provided by the WHO and other international best practice. WHO resources include technical guidance on: (i) laboratory biosafety, (ii) infection prevention and control, (iii) rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, (iv) water, sanitation, hygiene and waste management, (v) quarantine of individuals, (vi) rational use of PPE, (vii) oxygen sources and distribution for COVID-19 treatment centers. Additional guidance is listed in Annex VIII-Resource List: COVID-19 Guidance.

4. ENVIRONMENTAL AND SOCIAL BASELINE

Background. As per the constitution's mandate, the Ministry of Health in Bhutan is providing free basic health services through both traditional and modern medicine in an integrated approach. The focus is on primary care with disease prevention and health promotion. With an estimated total fertility rate of 1.9 per 1000 live births and annual population growth of 1.2 percent in 2017, this Himalayan kingdom is composed of a largely a young and economically productive population. Health outcomes are among the best in South Asia. There has been increasing trends of antenatal care coverage (82 percent with at least 4 ANC visits) and deliveries by skilled health personnel (96 percent). Immunization coverage has been sustained at about 95 percent since 2008, and malaria cases have reduced significantly from an incidence rate of 927 in 2000 to 1.4 cases per 100,000 in 2016. There have also been notable achievements in reducing the burden of Tuberculosis.

Despite significant improvements in population health in recent decades, however, challenges remain. Malnutrition remains persistently high in the country. Recent estimates indicate that more than one-fifth of all children over five in Bhutan are stunted, i.e., they have low height-for-age, representing chronic undernutrition. National stunting rates have declined rapidly -- from 37 percent in 2008 to 35 percent in 2010 to 22 percent in 2015 among children aged 6-59 months -- but remain high in the eastern region of the country as well as among the poor and in rural areas. More than one-third of all poor children are stunted compared to only 5 percent among the rich: a staggering difference of almost 30 percentage points. Underlying high rates of malnutrition among children in Bhutan are low rates of exclusive breastfeeding (51 percent) and poor diets: only 17 percent of children are given iron-rich foods, and just 15 percent are provided with four or more food groups. Anemia rates among women and adolescent girls range between 27 percent and 36 percent, indicating a lingering prominent public health problem. Other health inequalities related to geography and economic status remain, e.g., coverage of antenatal care and institutional delivery rates are much lower in the central and eastern parts of the country, and among the poor.

Health Service.

Health services in the country are available through a three-tier structure: (i) basic health units (BHUs), sub-posts and outreach clinics (ORCs) at the primary level; (ii) district or general hospitals at the secondary level; and (iii) regional and national referral hospitals at the tertiary level. Traditional and allopathic medicine services are fully integrated and delivered under one roof. At the grassroots level, village health workers (VHWs) play a key role in health promotion and act as a bridge between health services and the community.

Life expectancy of Bhutan population at birth is 71.12/71.81 (m/f). Total expenditure on health per capita is USD 290.42 and as a percentage of GDP is 3.19. There are an estimated 4.24 physicians per 10,000 population and 18.52 nurses per 10,000 population (estimates based on World Bank Data). Out of pocket expenditures stand at 13.30% of current health expenditure. There are 17 hospital beds per 10,000 people that comes from 32 hospitals and 208 Basic Health Units (BHU).

Despite outstanding achievements in health systems performance and health outcomes, the country faces multiple burden of health challenges. While communicable diseases remain a substantial burden, Non-Communicable Diseases (NCDs) are increasing. A few other emerging, challenging issues are crime, substance dependence and suicide/other mental health problems. Bhutan is also prone to natural disasters and hazards such as earthquake, landslides, floods and outbursts of supraglacial lakes.

Waste Management.

Bhutan's healthcare system has been expanding progressively with increase in the number of health infrastructures. The increase in these facilities has led to a steady rise in the quantity of health care wastes.

At present, there are 29 Hospitals, 01 NRH, 24 BHU1s, 184 BHUs, 28 sub post and 494 ORCs in the country. (Annual Health Bulletin, 2016).

In Bhutan, as per the Annual Medical Waste Report (Ministry of Health, 2017-18) 602 tons of Medical waste is generated by the above stated health facilities. And it is expected to increase over the years due to the increased no. of health care infrastructure and range of health care services. Within this volume of waste, 60% is general waste and 40% is infectious. There is currently very limited knowledge about healthcare waste management among health staff and waste handlers in Bhutan, leading to unsafe practices. As mentioned earlier, the healthcare waste management guidelines are present but there are challenges at the implementation level in the health system which lacks human and technical resources.

The overall picture of waste management is as follows:

- **General waste is segregated at source:** Few hospital recycle the waste (3 RRH, Samtse, Phuntsholing hospitals), some are burnt and some are dumped in the municipal land fill
- **Infectious waste** is autoclaved in a few hospitals where waste autoclave are available, however in most cases they are dipped in chlorine solution and dumped in the municipal land fill
- **Sharps** are disposed in the yellow box and when it is two-third full, it is thrown in the deep burial pit wherever available
- **Placenta** are disposed in deep burial pits
- **Pharmaceutical waste:** Expired Hazardous waste are burnt at Gomtu Cement factory currently whereas non- hazardous pharmaceutical wastes are disposed in the sewerage system.

For example, in Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), the infectious waste is disinfected by autoclave and then sent to municipal waste stream along with non-infectious general waste. In JDWNRH, the sharps waste and the genotoxic waste is sent to a centralized incineration plant installed in one of the cremation grounds located near Thimphu city. General Waste as well as treated Infectious waste is directly sent to Memelhakha Municipal Landfill site. The pathological waste generated from placentas from maternity delivery rooms is directly disposed in the placenta pit located inside the hospital premises. In JDWNRH, recyclable waste, such as cartons, plastic water and saline bottles, are collected by the cleaners and ward boys of the hospital, stored in the small rooms in the wards or units or open corners of the buildings inside the premises and sold to scrap dealers. Although this effort is commendable, the current practice of waste recycling does not meet occupational health and safety standards. It was found that the level of universal precautions followed by the hospital is not adequate to protect staff safety and prevent infection.

The main challenges related to medical waste management are:

- Lack of waste burial pits in healthcare facilities
- Shortage of resources and supplies (PPEs, supply of disinfection agents, autoclaves etc)
- Shortage of color-coded containers and storage areas for wastes.
- Irregular collection schedules of municipal waste collection vehicles
- Lack of digital weighing scales in healthcare facilities which deters appropriate record-keeping of waste generated
- Lack of practice of segregation at source.
- Lack of training of healthcare professionals handling medical waste.
- Lack of manpower

Testing for COVID-19. Bhutan uses the Real Time-PCR as a diagnostic test for testing of SARS-CoV-2 as recommended by WHO and Technical Advisory Group (TAG) for COVID-19 of the Ministry of Health. Bhutan currently has three designated testing centers at RCDC (Thimphu), Eastern Regional Referral Hospital (Mongar) and Phuentsholing General Hospital (Chukha). In addition to the molecular

test, Bhutan is also using rapid test kits for COVID-19 for screening high-risk individuals and communities. All positive rapid test results are being further sent for molecular tests for confirmation. The samples of all COVID-19 suspected cases are being mandatorily collected in the flu clinics or at hospitals. Case investigation forms are also filled up. These samples along with the form are then sent to the nearest testing centers for confirmatory tests and further investigation. All these are being guided by the COVID-19 Testing Strategy and COVID-19 Integrated Influenza Surveillance Guideline.

5. POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION

Environmental Risks. The major environmental risks are: (i) the occupational health and safety issues related to testing and handling of supplies; (ii) MWM and community health and safety issues related to the handling, transportation and disposal of healthcare wastes; and (iii) minor/moderate scale construction impacts related to air, water, noise emissions and waste. Waste that will be generated from labs, quarantine facilities and screening posts could include liquid contaminated waste (e.g. blood, other body fluids and contaminated fluid) and infected materials (water used; lab solutions and reagents, syringes, bed sheets, majority of waste from labs and quarantine and isolation centers, etc.) which require special handling and awareness, as it may pose an infectious risk to healthcare workers who come in contact with or handling the waste. Poor infection control and occupational health and safety practices due to lack of proper Personal Protective Equipment (PPE) and lack of training, awareness and understanding of health risks can contribute to increased risk of infection (can be fatal in case of Covid-19) in HCFs. When the healthcare workers exposed to the hospital environment do not use appropriate personal protective equipment (PPE) they become vulnerable to diseases.

Other environmental concern related to medical facilities are limited number of color-coded and labeled waste bins in HCFs. This compromises the medical waste segregation at the source of generation. Infectious and non-infectious wastes are stored and transported in a plastic bag. This pose operational risks to waste workers. The service coverage and quality of incineration/treatment facilities is limited, temporary incinerators, open burning or/and disposed in the general waste bins while exposing the public and environment to additional risks. Inadequate storage, poor collection and untimely disposal can attract stray animals and rag pickers and become breeding grounds for vector-borne, water-based and fecal-oral infections. There is also the risk of contamination of water bodies which can potentially affect a larger community beyond the hospital workers. The minor civil works may cause noise and emissions from vehicles and machinery, waste generation and may involve risks regarding workplace and community health and safety.

Social Risks.

The project will support renovation/refurbishment of selected health facilities, but only within existing footprints. Therefore, no land acquisition is envisaged as civil works involved will be within existing health facilities. No new infrastructure is planned, to be built on either public or private property. The refurbishment and rehabilitation of the health facilities will entail employment of local labor, but the number is not likely to cause any significant labor influx and its associated risks and impacts. However, given that work will take place in potential COVID-19 environments where workers are likely be exposed to the virus, especially if necessary PPEs, training and enforcement of mitigation measures are not provided, workers' occupational health and safety may be detrimentally affected. Further, the healthcare workers who will be assigned in the healthcare facilities will also face similar exposure risks which may affect their health and without adequate mitigation measures in line with WHO and Governmental guidelines it will also affect the availability of medical staffs, constraining already stretched resources. The project includes specific Behavioral Risk and Communication (BRC) aspects to inform the general public about the disease personal health and hygiene issues, provision of correct and updated information to reduce social risks from the spread of misinformation.

Given the nature of the outbreak and potential lack/shortage of support/ equipment/ manpower, vulnerable and disadvantaged people may be left out of much needed and in-demand services. Vital information and other physical medical resources may also be less available to marginalized sections of the community. It

is of paramount importance that vulnerable and disadvantaged people are provided with equal access to the services of the project and are consulted equally.

MITIGATION MEASURES

PLANNING AND DESIGN STAGE

Key ES issues that should be considered at the planning and design stage may include considering the following features of the subproject:

- **Location, type and scale of healthcare facilities and associated waste management facilities, including waste transport routes.**
 - **Location of facilities:** In addition to normal considerations regarding proximity to sensitive areas such as a cultural heritage site or a nature reserve, the environmental and social assessment should examine nearby sensitive social receptors such as a residential area or school and availability of municipal services such as public water supply, sewage and waste collection services at the location.
 - **Type and scale of facilities:** The assessment should identify and examine the salient characteristics and carrying/disposal capacity of a targeted facility. The assessment should consider the waste processing and transportation arrangements, operational procedures and working practices, and the required capacity of the type of disposal facility needed for the volume of the wastes generated. For example: a general hospital, a high-level biosafety laboratory for coronavirus testing; a temporary hospital or quarantine area, a pyrolytic incinerator or a hazardous waste landfill for medical waste disposal.
 - **Quarantine and isolation centers:** These may be located at Point of Entry, border, urban and/or rural areas. Tents may be used. The govt is considering setting-up makeshift structures (in the form of tents) within existing govt structures/plots for isolation centers and these will likely include govt schools, sport stadiums, gymnasiums, etc. Requirements on food, water, fuel, hygiene, infection, GBV/SEAH prevention and control, and monitoring the health of quarantined persons should be considered.
- Proper design and functional layout of healthcare facilities, which may involve several aspects: i) structural and equipment safety, universal access¹; ii) nosocomial infection² control; iii) waste segregation, storage and processing. Internationally recognized guidelines are available and should be referenced.
- No land acquisition is envisaged since civil work involved will be refurbishment and rehabilitation of healthcare facilities. No new infrastructure has been planned to be built either on public or private property. Existing waste management facilities will be used for waste disposal and no additional waste management facilities/ dumpsite/ landfill will be required.

CONSTRUCTION STAGE

The PIU will ensure that all rehabilitation work done at the HCFs under the project will be carried out in compliance with a site-specific ESMP based on the template in Annex III of this ESMF. The PIU will develop site specific ESMPs through the E&S consultants hired for the project before the approval of each

¹ Refer to ESS 4 Community Health and Safety

² 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”.

subprojects. The site-specific ESMPs will include:

- Environmental risks and impacts associated with resource efficiency and material supply; construction related solid wastes, wastewater, noise, dust and emission management; hazardous materials management
- Occupational Health and Safety (OHS) issues;
- Community health and safety issues;
- Social issues, including in relation to labor influx, GBV/Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks, gender or disability
- Labor and working conditions. Arrangements for employment and accommodation of workers to be engaged in project activities, and issues relating to working conditions (including in relation to periods of sickness and quarantine), particularly if these are impacted by emergency legislation

The ESMP will form part of the Contract and the ESMF will be part of the bidding document. The key suggestions are given below:

- The implementing agency to depute a qualified environment social expert/focal officer to work with the contractors, the agency officials and the WB to comply the relevant needed measures for COVID 19 Pandemic according to above guidance and National regulation.
- The PIUs should review the contract document and identify the obligation the work force and what has to change to cover the COVID requirements in the enclosed documents and how to solve the issues.
- For supervision, using online, mobile-friendly reporting and monitoring tool that will assist both the contractor, government and relevant stakeholders to monitor COVID-19 on construction sites, The contractors are required to complete a daily report per project, whereby all projects details, and health and safety status of employees in utilizing the online reporting and monitoring system.
- To exercise social distancing, the contractor and other parties should consider specific channels of communications for consultation and stakeholder engagement activities.

For a detailed mitigation measures related to construction activities refer to World Bank Interim Note on COVID-19 Considerations in Construction/Civil Works Projects.(Annex VIII)

OPERATIONAL STAGE

Medical waste management and disposal. The PIU and HCFs will ensure the following:

- Each HCF is operated in accordance with the ICWMP prepared for the project;
- Waste segregation, packaging, collection, storage disposal, and transport is conducted in compliance with the ICWMP and WHO COVID-19 Guidelines;
 - Onsite waste management and disposal will be reviewed regularly and training on protocols contained in the ICWMP conducted on a weekly basis;
 - The PIU will audit any off-site waste disposal required on a monthly basis and institute any remedial measures required to ensure compliance; and
- Waste generation, minimization, reuse and recycling are practiced where practical in the

COVID-19 context.

Protecting healthcare workers. The PIU and HCFs will ensure the following:

- Regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;
- Ensure protocols for regular disinfection of public spaces, wards, ICUs, equipment, tools, and waste are in place and followed;
- Ensure hand washing and other sanitary stations are always supplied with clean water, soap, and disinfectant;
- Ensure equipment such as autoclaves are in working order; and
- Provide regular testing to healthcare workers routinely in contact with COVID-19 patients.
- No person under the age of 18 is employed for the project given the hazardous work environment.
- Ensure that if health care workers are pushed to work without proper PPEs, they can access the GRM register for complaints. A Grievance Redress Mechanism (GRM) has been developed in the LMP to allow workers to raise workplace safety, assignment and other security/safety issues through multiple channels.

Containment of COVID-19. The PIU and HCFs will ensure the following:

- Quarantine procedures for COVID-19 patients are maintained;
- Patients in quarantine are not discriminated due to socioeconomic status, level of education, gender, disabilities and any other vulnerabilities.
- When practical, COVID-19 patients are given access to phone or other means of contact with family and friends to lessen the isolation of quarantine;
- Patients in quarantine have access to development and project related information and should be able to take part in consultation through appropriate means
- The public is regularly updated on the situation and reminded of protocols to prevent the spread of COVID-19; and
- Members of the general public (family and friends) who have been exposed to confirmed COVID-19 patients are tested when practical.
- WHO quarantine guidelines can be found at:
<https://apps.who.int/iris/rest/bitstreams/1272428/retrieve>

For detailed HCF infection and prevention control protocol and WASH protocol guidelines are provided in the Annexes V and VI.

OHS and labor and working conditions: A Labor Management Procedure (LMP) had been developed to address the labor risks.

DECOMMISSIONING STAGE

In response to the surge of COVID-19 testing and treatment, there are plans to establish temporary isolation centers in government facilities like schools, stadiums, gymnasium and open fields etc. The ES risks and assessment due to decommissioning of these makeshift structure would be done in line with the Table 4 of the ESMP template provided in the Annex III.

6. PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

The Implementing Agency (MoH) is responsible for the overall implementation of the project through the PIU. The PIU will have day to day responsibility for project management and support, including ensuring that project implementation is compliant with the World Bank's ESF, Government of Bhutan laws and regulations, Good International Industry Practice (GIIP); EHS; WHO COVID-19 Guidelines and this ESMF. The PIU will be adequately staffed (especially with an Environmental and a Social Specialist) to oversee the project's work and ensure that each HCF complies with all project procedures and receive professional implementation and project management support, including for procurement. PIU staffs will specifically oversee implementation of medical waste management and disposal systems as well as of general occupational health and safety issues for healthcare workers and minor civil works.

Each individual HCF undertaking activities financed by the project will assign one staff member who will be responsible for liaising with the PIU on ESMF implementation throughout the life of the project at that specific HCF.

Implementation of this ESMF will include the following activities, to be undertaken by the PIU working closely with the individual HCFs:

Screening. All activities undertaken by the project will be screened using the form found in the Annex II (including negative list for CERC) in order to exclude certain high or substantial risk activities, identify potential ES issues, and classify the ES risks. Copies of each of these screening forms will be kept at the PIU and individual HCFs. The PIU's periodic report to the Bank will include copies of each screening undertaken during the subject quarter.

ES Instruments. The PIU and individual HCFs will prepare and implement the necessary ES instruments for each of the activities financed under the project. The scope of this Project includes following three types of ES instruments:

ESMPs. After the screening, ESMPs, based on the template found in the Annex III, will be prepared for any small-scale works to be conducted at any HCF including the creation or rehabilitation of ICUs and the laboratories, the rehabilitation or installation of sanitary stations and hand washing facilities, and the rehabilitation or installation of medical waste incinerators.

ICWMPs. Each HCF will prepare and implement an ICWMP, based on the sample found in the Annex IV.

SEP. The IA has prepared a SEP for the project and it is applicable to all project financed activities. Individual HCFs will follow the guidelines mentioned in the SEP to ensure patients and their families, local authorities, and the general public are aware of the pandemic situation and have access to community-based hotlines, GRMs, and other important information channels.

Consultation and Disclosure. Given the need for social distancing during the COVID-19 pandemic, stakeholder consultations for the ES instruments, will be conducted virtually whenever possible, as per instructions in the SEP. The SEP has identified key stakeholders and organized consultations for information exchange about the Project and its risks and impacts. All instruments will be disclosed on the PIU website with print copies also available at their offices and preferably with the HCFs. Copies of instruments prepared and disclosed will be

included in the PIU's Quarterly Report to the Bank and disclosed on the WB website.

Review and Approval. The individual instruments will be prepared by PIU and will be reviewed by WB ES teams before they are implemented. Updates on the instruments will also be sent to WB for review, guidance, and comments.

Implementation. The PIU as well as the individual HCF will be responsible for the implementation of the instruments. For ESMPs, this responsibility will be shared with contractors and supervising consultants when applicable. The PIU will also provide implementation support and supervision.

Monitoring and Reporting. There will be two types of reports, Monthly from the HCFs to the PIU and periodic reports from the PIU to the Bank as per ESCP:

Monthly Reports. Individual HCFs will prepare and provide monthly reports to the PIU on each activity being undertaken. These reports will include progress on any on-going small works, statistics related to the implementation of the ICWMP, statistics related to local hotlines, any grievances received via the GRM and information on their resolution, and any other relevant information.

Periodic Reports. The PIU will submit an overall report of project implementation to the Bank as per commitment on the ESCP (Half Yearly (every six months) throughout the Project implementation period). These reports will include statistics on national project implementation; a summary of grievances received and their resolution, a summary of activities for each individual HCF, and copies of screenings and individual HCF instruments prepared during the subject quarter.

7. PUBLIC CONSULTATION AND DISCLOSURE

Due to the nature of COVID-19 outbreak and its diffusion mechanism, initial consultation has been limited to public authorities and national health experts, as well as international health organization representatives. As per the SEP, the project will adapt to different situations and requirements as they develop to disclose information regarding COVID-19 and other relevant issues. Information will build on national guidance on avoiding the spread of the virus and will focus specifically on risks associated with project activities.

Table. Strategy for Information Disclosure and Consultation Process (will be updated during implementation)

Project stage	Topic of consultation and list of information disclosure	Method used	Target stakeholders	Responsibilities
Done before appraisal	PAD, SEP, ESRS	WB and MoH website	Health stakeholders and the general public	Implementing Agency (IA)
Within one month of effectiveness	Updated SEP and Risk Communication and Community Engagement Strategy, ESMF, , LMP	WB and MoH website	All stakeholders identified above	IA
Quarterly	Progress report including summaries of complaints and resolution	WB and MoH website	Implementing partners	IA
Before key activities	ESIA or ESMP	WB and MoH website	Key stakeholders for specific activities	IA
Annual	Annual report on progress and lessons learnt	WB and MoH website	General public	IA

Further, following guidelines has been suggested by the WB for projects under preparation, to be adopted while conducting stakeholder consultation and engagement:

- Review the country COVID-19 spread in the project area, and the restrictions put in place by the government to contain virus spread;
- Review the SEP, particularly the approach, methods and forms of engagement proposed, and assess the associated potential risks of virus transmission in conducting various engagement activities;
- Be sure that all PIU and HCF members articulate and express their understandings on social behavior and good hygiene practices, and that any stakeholder engagement events be preceded with the procedure of articulating such hygienic practices;
- Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings, and minimize direct interaction between project agencies and beneficiaries / affected people;
- If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings. If not permitted, make all reasonable efforts to conduct meetings through online channels, including WebEx, Zoom and Skype meetings;

- Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chat groups appropriate for the purpose, based on the type and category of stakeholders;
- Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements and mail) when stakeholders do not have access to online channels or do not use them frequently;
- Employ online communication tools to design virtual workshops in situations where large meetings and workshops are essential, given the preparatory stage of the project;
- In situations where online interaction is challenging, information can be disseminated through digital platform (where available) like Facebook, Twitter, WhatsApp groups, Project weblinks/ websites, and traditional means of communications (TV, newspaper, radio, phone calls and mails with clear description of mechanisms for providing feedback via mail and / or dedicated telephone lines. All channels of communication need to clearly specify how stakeholders can provide their feedback and suggestions;

8. STAKEHOLDER ENGAGEMENT

A Stakeholder Engagement Plan (SEP) has been prepared for the project detailing stakeholder identification, method and subject of communication and grievance redress mechanism. The SEP is referred here for detail requirements on stakeholder engagement and GRM.

9. INSTITUTIONAL ARRANGEMENTS, RESPONSIBILITIES AND CAPACITY BUILDING

The Project will set up a Project Implementation Unit (PIU) in the MoH that will be headed by a Project Director (PD). A Project Steering Committee (PSC) will be established to provide guidance to the PIU. PIU will recruit an Environmental and a Social Specialist in the PIU, who will be responsible for:

- Preparation and consultation for required ES instruments
- Addressing ES risks and impacts including monitoring of the implementation of all ES instruments, community health and safety measures, the functioning of the grievance redress mechanism (GRM) etc.
- Screening of subprojects (Form at Annex II) for ES issues, disclosure, review and clearance of subprojects to monitoring the implementation of the ESMP.
- Prepare ICWMP (Template at Annex IV) in coordination with the Head of HCFs and ensure implementation and monitoring

In the Operation stage, the PIU will ensure the following aspects are followed in the HCFs:

- Define roles and responsibilities along each link of the chain along the cradle-to-crave infection control and waste management process;
- Ensure adequate and qualified staff are in place in all HCFs, including those in charge of infection control and biosafety and waste management facility operation.
- Stress that the Head of an HCF takes overall responsibility for infection control and waste management;
- The management involves all relevant departments in a healthcare facility, and build an intra-departmental team to manage, coordinate and regularly review the issues and performance;
- Establish an information management system to track and record the waste streams in HCF; and
- Capacity building and training should involve medical workers, waste management workers and cleaners. Third-party waste management service providers should be provided with relevant training as well.

The training topics will include (for health workers, administrative and operational personnel, construction workers and community in general):

- Use and disposal of PPE (for all)
- Working in COVID-19 environment (construction workers)
- COVID-19 Infection Prevention and Control Recommendations (Health care workers)
- Laboratory biosafety guidance related to the COVID-19 (Laboratory personnel)
- Specimen collection and shipment (Laboratory personnel)
- Standard precautions for COVID-19 patients (Health care workers)
- Risk communication, prevention and community engagement (Administrative and operational personnel)
- WHO and CDC guidelines on quarantine including case management
- Waste disposal and management (Waste disposal staffs and healthcare personnel)

Annexes

- I. Abbreviations and Acronyms
- II. Screening Form for Potential Environment and Social Issues (including negative list for CERC)
- III. Environmental and Social Management Plan (ESMP) Template
- IV. Infection Control and Waste Management Plan (ICWMP) Template
- V. Infection and Prevention Control Protocol
- VI. WASH Protocol for HCF Treating COVID-19 Patients
- VII. Resource List COVID-19 Guidance
- VIII. COVID-19 Considerations in Construction/Civil Work project

ABBREVIATIONS AND ACRONYMS

AFB	Acid-Fast Bacilli
AMR	Antimicrobial Resistance
BHU	Biosafety in Micro Biological and Biomedical Laboratories
BMBL	Basic Health Unit
BMW	Bio Medical Waste Management
BSC	Biological Safety Cabinets
BSL	Biosafety Level
CDC	Centre for Disease Control and Prevention
COVID-19	Coronavirus Disease 2019
EOC	Emergency Operating Centre
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESHS	Environmental, Social, Health and Safety
EHS	Environmental, Health and Safety
ERP	Emergency Response Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GBV	Gender Based Violence
HCF	Healthcare Facility
HCW	Healthcare Waste
HEPA	High Efficiency Particulate Air filter
HIV	Human Immunodeficiency Virus
HORMP	Human and Occupational Resource Management Procedure
HWMS	Healthcare Waste Management System
HVAC	Heating, Ventilation and Air Conditioning
ICWMP	Infection Control and Waste Management Plan
IPC	Infection and Prevention Control
NRH	National Referral Hospital
OHS	Occupational Health and Safety
ORC	Outreach Clinic
POE	Point of Entry
PPE	Personal Protective Equipment
PPSD	Project Procurement Strategy for Development
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
RRH	Regional Referral Hospital
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SOP	Standard Operating Procedures
TA	Technical Assistance
TB	Tuberculosis
WB	World Bank
WHO	World Health Organization
WWTP	Wastewater Treatment Plant

SCREENING FORM FOR POTENTIAL ENVIRONMENTAL AND SOCIAL ISSUES

This form is to be used by the Project Implementation Unit (PIU) to screen for the potential environmental and social risks and impacts of a proposed subproject. It will help the PIU in identifying the relevant Environmental and Social Standards (ESS), establishing an appropriate ES risk rating for these subprojects and specifying the type of environmental and social assessment required, including specific instruments/plans. Use of this form will allow the PIU to form an initial view of the potential risks and impacts of a subproject. *It is not a substitute for project-specific ES assessments or specific mitigation plans.*

A note on *Considerations and Tools for ES Screening and Risk Rating* is included in this Annex to assist the process.

Subproject Name	
Subproject Location	
Subproject Proponent	
Estimated Investment	
Start/Completion Date	

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	No		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of healthcare facilities and/or waste management facilities?			ESS1	ESIA/ESMP, SEP
Does the subproject involve land acquisition and/or restrictions on land use?			ESS5	RAP/ARAP, SEP
Does the subproject involve relocation of encroachers or squatters?			ESS5	RAP/ARAP/SEP
Does the subproject involve acquisition of assets for quarantine, isolation or medical treatment purposes?			ESS5	
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater 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 subproject have an adequate system in place (capacity, processes and management) to address waste?				
Does the subproject involve recruitment of workers including direct, contracted, primary supply, and/or community workers?			ESS2	HORMP, SEP
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?				
Does the subproject have a GRM in place, to which all workers have access, designed to respond quickly and effectively?				
Does the subproject involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?			ESS4	ESIA/ESMP, SEP
Is the subproject 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 subproject area and are they likely to be affected by the proposed subproject negatively or positively?			ESS7	Indigenous Peoples Plan/other plan reflecting agreed terminology
Is the subproject 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

Conclusions:

1. **Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low). Provide Justifications.**
2. **Proposed ES Management Plans/ Instruments.**

INFECTION CONTROL: CONSIDERATIONS AND TOOLS TO ASSIST IN ES SCREENING AND RISK RATING:

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

A COVID-19 response project may include the following activities:

- construction of and/or operational support to medical laboratories, quarantine and isolation centers at multiple locations and in different forms, and infection treatment centers 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 and wastewater facilities
- training of medical workers and volunteers
- community engagement and communication

1. Screening ES Risks of Medical laboratories

Many COVID-19 projects 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. OHS 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 ES 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 ES 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.

Many COVID-19 projects include 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 ES 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 wastewater management

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 ES 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 repurpose 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 ES RISKS RELATING TO LABOR AND WORKING CONDITIONS

A COVID-19 project may 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. Further details relevant to labor and working conditions for COVID-19 projects are discussed in the attached Human and Occupational Resource Management Procedure (HORMP, or in ESF term an LMP)

NEGATIVE LIST FOR CERC

Attributes of Ineligible Subprojects
GENERAL CHARACTERISTICS
Concerning significant conversion or degradation of critical natural habitats. Including, but not limited to, any activity within wildlife and forest reserves, national parks, conservation forests and sanctuaries.
Damages cultural property, including but not limited to, any activities that affect the properties inscribed in the World Heritage List and : <ul style="list-style-type: none"> • Other archaeological and historical sites; and • Religious monuments, structures and cemeteries.
Requires involuntary acquisition of land, or the resettlement or compensation of more than 200 people
Requiring pesticides that fall in WHO classes IA, IB, or II.
Affecting waters of riparian neighbors.
Roads New primary roads and highways.
Irrigation New irrigation and drainage schemes.
Dams Construction of any dams.
Power New power generating capacity of more than 10 MW.
Oil and Gas New exploration, production or distribution. Rehabilitation of production or distribution systems.
Income Generating Activities Activities involving the use of wood for fuel or as raw material from natural habitats. Activities involving the use of hazardous substances.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) TEMPLATE

Introduction

The Borrower will ensure that site specific Environmental and Social Management Plans (ESMP) are developed by the PMU, setting out how the environmental and social risks and impacts will be managed through the project lifecycle. This ESMP template includes several matrices identifying key risks and setting out suggested ES mitigation measures. The Borrower can use the matrices to assist in identifying risks and possible mitigations.

The ESMP should also include other key elements relevant to delivery of the project, such as institutional arrangements, plans for capacity building and training plan, and background information. The Borrower may incorporate relevant sections of the ESMF into the ESMP, with necessary updates.

The matrices illustrate the importance of considering lifecycle management of ES risks, including during the different phases of the project identified in the ESMF: planning and design, construction, operations and decommissioning.

The issues and risks identified in the matrix are based on current COVID-19 responses and experience of other Bank financed healthcare sector projects. The Borrower should review and add to them during the environmental and social assessment of a subproject.

The WBG EHS Guidelines, WHO technical guidance documents and other GIIPs set out in detail many mitigation measures and good practices, and can be used by the Borrower to develop the ESMP. Proper stakeholder engagement should be conducted in determining the mitigation measures, including close involvement of medical and healthcare waste management professionals.

The Infection Control and Waste Management Plan forms part of the ESMP. The ESMP should identify other specific ES management tools/instruments, such as Human and Occupational Resource Management Procedure (HORMP), and/or Medical Waste Management Plan etc.

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

Key Activities	Potential ES Risks and Impacts	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
Identify the type, location and scale of healthcare facilities (HCF)					
Identify the need for new construction, expansion, upgrading and/or rehabilitation					
Identify the needs for ancillary works and associated facilities, such as access roads, construction materials, supplies of water and power, sewage system					
Identify the needs for acquisition of land and assets (e.g. acquiring existing assets such as hostel, stadium to hold potential patients)					
Identify onsite and offsite waste management facilities, and waste transportation routes and service providers	Inadequate facilities and processes for treatment of waste	<ul style="list-style-type: none"> ➤ Estimate potential waste streams ➤ Consider the capacity of existing facilities, and plan to increase capacity, if necessary, through construction, expansion etc. ➤ Specify that the design of the facility considers the collection, segregation, transport and treatment of the anticipated volumes and types of healthcare wastes ➤ Require that receptacles for waste should be sized appropriately for the waste volumes generated, and color coded and labeled according to the types of waste to be deposited. <p>Develop appropriate protocols for the collection of waste and transportation to storage/disposal areas in accordance with WHO guidance. Design training for staff in the segregation of wastes at the time of use</p>			
Identify needs for transboundary movement of samples, specimen, reagent, and other hazardous materials					
Identify needs for workforce and type of project workers		<ul style="list-style-type: none"> ➤ Identify numbers and types of workers ➤ Consider accommodation and measures to minimize cross infection ➤ Use the attached HORMP to identify possible mitigation measures 			
Identify needs for using security personnel during construction and/or operation of HCF					

HCF design – general	<ul style="list-style-type: none"> - Structural safety risk; - Functional layout and engineering control for nosocomial infection 				
HCF design - considerations for differentiated treatment for groups of higher sensitivity or vulnerable (the elderly, those with preexisting conditions, or the very young) and those with disabilities	Some groups may have difficulty accessing health facilities				
Design of facility should reflect specific treatment requirements, including triage, isolation or quarantine		<ul style="list-style-type: none"> ➤ The design, set up and management of will take into account the advice provided by WHO guidance for <u>Severe Acute Respiratory Infections Treatment Center</u>. ➤ Hand washing facilities should be provided at the entrances to HCF in line with WHO <u>Recommendations to Member States to Improve Hygiene Practices</u>. ➤ Isolation rooms should be provided and used at medical facilities for patients with possible or confirmed COVID-19. ➤ Isolation rooms should: <ul style="list-style-type: none"> ✓ be single rooms with attached bathrooms (or with a dedicated commode); ✓ ideally be under negative pressure (neutral pressure may be used, but positive pressure rooms should be avoided) ✓ be sited away from busy areas or close to vulnerable or high-risk patients, to minimize chances of infection spread; ✓ have dedicated equipment (for example blood pressure machine, peak flow meter and stethoscope) ✓ have signs on doors to control entry to the room, with the door kept closed; <p>have an ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment.</p>			
Design to consider mortuary arrangements	Insufficient capacity Spread of infection	<ul style="list-style-type: none"> ➤ Include adequate mortuary arrangements in the design ➤ See <u>WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19</u> 			

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

Activities	Potential ES Risks and Impacts	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
Clearing of vegetation and trees; Construction activities near ecologically sensitive areas/spots	<ul style="list-style-type: none"> - Impacts on natural habitats, ecological resources and biodiversity 				
General construction activities Foundation excavation; borehole digging	<ul style="list-style-type: none"> - Impacts on soils and groundwater; - Geological risks 				
General construction activities	<ul style="list-style-type: none"> - Resource efficiency issues, including raw materials, water and energy use; - Materials supply 				
General construction activities – general pollution management	<ul style="list-style-type: none"> - Construction solid waste; - Construction wastewater; - Noise; - Vibration; - Dust; - Air emissions from construction equipment 				
General construction activities – hazardous waste management	<ul style="list-style-type: none"> - Fuel, oils, lubricant 				
General construction activities – Labor issues	<ul style="list-style-type: none"> - Workers coming from infected areas - Co-workers becoming infected - Workers introducing infection into community/general public 	<ul style="list-style-type: none"> - Refer to COVID-19 HORMP attached - Consider ways to minimize/control movement in and out of construction areas/site. - If workers are accommodated on site require them to minimize contact with people outside the construction area/site or prohibit them from leaving the area/site for the duration of their contract - Implement procedures to confirm workers are fit for work before they start work, paying special to workers with underlying health issues or who may be otherwise at risk - Check and record temperatures of workers and other people entering the construction 			

		<p>area/site or require self-reporting prior to or on entering</p> <ul style="list-style-type: none"> - Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures. - Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell - Prevent a worker from an affected area or who has been in contact with an infected person from entering the construction area/site for 14 days - Preventing a sick worker from entering the construction area/site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days 			
General construction activities – Occupational Health and Safety (OHS)					
General construction activities – traffic and road safety					
General construction activities – security personnel					
General construction activities – land and asset	Acquisition of land and assets				
General construction activities	GBV/SEA issues				
General construction activities – cultural heritage	Cultural heritage	Chance-finds procedure			
General construction activities – emergency preparedness and response					
Construction activities related to <i>onsite</i> waste management facilities,					

including temporary storage, incinerator, sewerage system and wastewater treatment works					
Construction activities related to demolition of existing structures or facilities (if needed)					
<i>To be expanded</i>					

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

Activities	Potential ES Risks and Impacts	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
General HCF operation – Environment	General wastes, wastewater and air emissions				
General HCF operation – OHS issues	<ul style="list-style-type: none"> - Physical hazards; - Electrical and explosive hazards; - Fire; - Chemical use; - Ergonomic hazard; - Radioactive hazard 				
HCF operation – Labor issue					
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)					
HCF operation – cleaning		<ul style="list-style-type: none"> • Provide cleaning staff with adequate cleaning equipment, materials and disinfectant. • Review general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas. • Where cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, provide appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, provide best available alternatives. • Train cleaners in proper hygiene (including hand washing) prior to, 			

		during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).			
HCF operation - Infection control and waste management plan					
Waste minimization, reuse and recycling	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. 			
Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies					
Storage and handling of specimen, samples, reagents, and infectious materials					
Waste segregation, packaging, color coding and labeling					
Onsite collection and transport					
Waste storage					
Onsite waste treatment and disposal					

Waste transportation to and disposal in offsite treatment and disposal facilities					
Transportation and disposal at offsite waste management facilities					
HCF operation – transboundary movement of specimen, samples, reagents, medical equipment, and infectious materials					
Operation of acquired assets for holding potential COVID-19 patients					
Emergency events	<ul style="list-style-type: none"> - Spillage; - Occupational exposure to infectious disease; - Exposure to radiation; - Accidental releases of infectious or hazardous substances to the environment; - Medical equipment failure; - Failure of solid waste and wastewater treatment facilities - Fire; - Other emergent events 	<ul style="list-style-type: none"> ➤ Emergency Response Plan 			
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 (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>) 			

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

Key Activities	Potential ES Risks and Impacts	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
Decommissioning of interim HCF					
Decommissioning of medical equipment					
Regular decommissioning					
<i>To be expanded</i>					

INFECTION CONTROL AND WASTE MANAGEMENT PLAN (ICWMP) TEMPLATE

1. Introduction

1.1 Describe the project context and components;

1.2 Describe the targeted healthcare facility (HCF):

- Type: E.g. general hospital, clinics, inpatient/outpatient facility, medical laboratory;
- *Special type of HCF in response to COVID-19: E.g. existing assets may be acquired to hold yet-to-confirm cases for medical observation or isolation;*
- Functions and requirement for the level infection control, e.g. biosafety levels;
- Location and associated facilities, including access, water supply, power supply;
- Capacity: beds

1.3 Describe the design requirements of the HCF, which may include specifications for general design and safety, separation of wards, heating, ventilation and air conditioning (HVAC), autoclave, and waste management facilities.

2. Infection Control and Waste Management

2.1 Overview of infection control and waste management in the HCF

- Type, source and volume of healthcare waste (HCW) generated in the HCF, including solid, liquid and air emissions (if significant);
- Classify and quantify the HCW (infectious waste, pathological waste, sharps, liquid and non-hazardous) following *National Guideline on Infection Control And Medical Waste Management* of the Department of Medical Services, MoH.
 - *Given the infectious nature of the novel coronavirus, some wastes that are traditionally classified as non-hazardous may be considered hazardous. It's likely the volume of waste will increase considerably given the number of admitted patients during COVID-19 outbreak. Special attention should be given to the identification, classification and quantification of the healthcare wastes.*
 - Describe the healthcare waste management system in the HCF, including material delivery, waste generation, handling, disinfection and sterilization, collection, storage, transport, and disposal and treatment works;
 - Provide a flow chart of waste streams in the HCF if available;
 - Describe applicable performance levels and/or standards;
 - Describe institutional arrangement, roles and responsibilities in the HCF for infection control and waste management.

2.2 Management Measures

- Applicable Guidelines: Medical waste management should follow National Guideline on Infection Control And Medical Waste Management of the Department of Medical Services, MoH and applicable WHO guidelines³.
- Waste minimization, reuse and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety consideration.
- Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies: HCF should adopt practice and procedures to minimize risks associated with delivering, receiving and storage of the hazardous medical goods.
- Waste segregation, packaging, color coding and labeling: HCF should strictly conduct waste segregation at the point of generation. Internationally adopted method for packaging, color coding and labeling the wastes should be followed.
- Onsite collection and transport: HCF should adopt practices and procedures to timely remove properly packaged and labelled wastes using designated trolleys/carts and routes. Disinfection of pertaining tools and spaces should be routinely conducted. Hygiene and safety of involved supporting medical workers such as cleaners should be ensured.
- Waste storage: A HCF should have multiple waste storage areas designed for different types of wastes. Their functions and sizes are determined at design stage. Proper maintenance and disinfection of the storage areas should be carried out. Existing reports suggest that during the COVID-19 outbreak, infectious wastes should be removed from HCF's storage area for disposal within 24 hours.
- Onsite waste treatment and disposal (e.g. an incinerator): Many HCFs have their own waste incineration facilities installed onsite. Due diligence of an existing incinerator should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended. For new HCF financed by the project, waste disposal facilities should be integrated into the overall design and ESIA developed. Good design, operational practices and internationally adopted emission standards for healthcare waste incinerator can be found in pertaining EHS Guidelines and GIIP.
- Transportation and disposal at offsite waste management facilities: Not all HCF has adequate or well-performed incinerator onsite. Not all healthcare wastes are suitable for incineration. An onsite incinerator produces residuals after incineration. Hence offsite waste disposal facilities provided by local government or private sector are probably needed. These offsite waste management facilities may include incinerators, hazardous wastes landfill. In the same vein, due diligence of such external waste management facilities should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended and agreed with the government or the private sector operators.
- Disposal of Personal Protective Equipment (PPE): If PPE is exposed to infectious materials during use (e.g., body fluids from an infected person) the PPE is considered contaminated and the wearer should remove it promptly, using proper removal procedures. It is essential that used PPE is stored securely within disposable rubbish bags. These bags should be placed into another bag, tied securely, marked (with date) and kept separate from other waste within the room. This should be put aside for at least 72 hours before being disposed of as normal.

³ Safe management of wastes from health-care activities / edited by Y. Chartier et al. – 2nd ed. Available at: http://www.euro.who.int/__data/assets/pdf_file/0012/268779/Safe-management-of-wastes-from-health-care-activities-Eng.pdf

- Wastewater treatment: HCF wastewater is related to the hazardous waste management practices. Proper waste segregation and handling as discussed above should be conducted to minimize entry of solid waste into the wastewater stream. In case wastewater is discharged into municipal sewer sewerage system, the HCF should ensure that wastewater effluent comply with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) is capable of handling the type of effluent discharged. In cases where municipal sewage system is not in place, HCF should build and proper operate onsite primary and secondary wastewater treatment works, including disinfection. Residuals of the onsite wastewater treatment works, such as sludge, should be properly disposed of as well. There're also cases HCF wastewater is transported by trucks to a municipal wastewater treatment plant for treatment. Requirements on safe transportation, due diligence of WWTP in terms of its capacity and performance should be conducted.
- Sanitation and Hygiene facilities and practices at existing healthcare facilities are important because coronavirus can find alternate pathways of infection (e.g. faeces and clothings of patients, PPE). A standard protocol for adoption is provided in Annex VI (water, sanitation and hygiene (WASH) protocols for healthcare facilities treating COVID-19 patients)

3. Emergency Preparedness and Response

Emergency incidents occurred in an HCF may include spillage, occupational exposure to infectious materials or radiation, accidental releases of infectious or hazardous substances to the environment, medical equipment failure, failure of solid waste and wastewater treatment facilities, and fire. These emergency events are likely to seriously affect medical workers, community, HCF's operation and the environment.

Thus, an Emergency Response Plan (ERP) that is commensurate with the risk levels is recommended to be developed. The key elements of an ERP are defined in ESS 4 Community Health and Safety (para. 21).

4. Institutional Arrangement and Capacity Building

A clearly defined institutional arrangement, roles and responsibilities should be included. A training plan with recurring training programs should be developed. The following aspects are recommended:

- Define roles and responsibilities along each link of the chain along the cradle-to-crave infection control and waste management process;
- Ensure adequate and qualified staff are in place, including those in charge of infection control and biosafety and waste management facility operation.
- Stress the chief of an HCF takes overall responsibility for infection control and waste management;
- Involve all relevant departments in a healthcare facility, and build an intra-departmental team to manage, coordinate and regularly review the issues and performance;
- Establish an information management system to track and record the waste streams in HCF; and
- Capacity building and training should involve medical workers, waste management workers and cleaners. Third-party waste management service providers should be provided with relevant training as well.

5. Monitoring and Reporting

Many HCFs in developing countries face the challenge of inadequate monitoring and records of healthcare waste streams. HCF should establish an information management system to track and record the waste streams from the point of generation, segregation, packaging, temporary storage, transport carts/vehicles,

to treatment facilities. HCF is encouraged to develop an IT based information management system should their technical and financial capacity allow.

As discussed above, the HCF chief takes overall responsibility, leads an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices in the HCF. Internal reporting and filing system should be in place.

Externally, reporting should be conducted per government and World Bank requirements.

Table ICWMP

Activities	Potential ES Issues and Risks	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
General HCF operation – Environment	General wastes, wastewater and air emissions				
General HCF operation – OHS issues	<ul style="list-style-type: none"> - Physical hazards; - Electrical and explosive hazards; - Fire; - Chemical use; - Ergonomic hazard; - Radioactive hazard. 				
HCF operation - Infection control and waste management plan					
Waste minimization, reuse and recycling					
Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies					
Storage and handling of specimen, samples, reagents, and infectious materials					
Waste segregation, packaging, color coding and labeling					
Onsite collection and transport					
Waste storage					
Onsite waste treatment and disposal					
Waste transportation to and disposal in offsite treatment and disposal facilities					
HCF operation – transboundary movement of specimen, samples, reagents, medical equipment, and infectious materials					

Emergency events	<ul style="list-style-type: none"> - Spillage; - Occupational exposure to infectious; - Exposure to radiation; - Accidental releases of infectious or hazardous substances to the environment; - Medical equipment failure; - Failure of solid waste and wastewater treatment facilities; - Fire; - Other emergent events 	Emergency response plan			
Operation of acquired assets for holding potential COVID-19 patients					
<i>To be expanded</i>					

INFECTION AND PREVENTION CONTROL PROTOCOL

(Adapted from the CDC Interim Infection Prevention and Control Recommendations for patients with confirmed COVID-19 or persons under investigation for COVID-19 in Healthcare Settings)

HEALTH CARE SETTINGS

1. Minimize Chance of Exposure (to staff, other patients and visitors)

- Upon arrival, make sure patients with symptoms of any respiratory infection to a separate, isolated and well-ventilated section of the HCF to wait, and issue a facemask
- During the visit, make sure all patients adhere to respiratory hygiene, cough etiquette, hand hygiene and isolation procedures. Provide oral instructions on registration and ongoing reminders with the use of simple signs with images in local languages
- Provide alcohol-based hand sanitizer (60-95% alcohol), tissues and facemasks in waiting rooms and patient rooms
- Isolate patients as much as possible. If separate rooms are not available, separate all patients by curtains. Only place together in the same room patients who are all definitively infected with COVID-19. No other patients can be placed in the same room.

2. Adhere to Standard Precautions

- Train all staff and volunteers to undertake standard precautions - assume everyone is potentially infected and behave accordingly
- Minimize contact between patients and other persons in the facility: health care professionals should be the only persons having contact with patients and this should be restricted to essential personnel only
- A decision to stop isolation precautions should be made on a case-by-case basis, in conjunction with local health authorities.

3. Training of Personnel

- Train all staff and volunteers in the symptoms of COVID-19, how it is spread and how to protect themselves. Train on correct use and disposal of personal protective equipment (PPE), including gloves, gowns, facemasks, eye protection and respirators (if available) and check that they understand
- Train cleaning staff on most effective process for cleaning the facility: use a high-alcohol based cleaner to wipe down all surfaces; wash instruments with soap and water and then wipe down with high-alcohol based cleaner; dispose of rubbish by burning etc.

4. Manage Visitor Access and Movement

- Establish procedures for managing, monitoring, and training visitors
- All visitors must follow respiratory hygiene precautions while in the common areas of the facility, otherwise they should be removed
- Restrict visitors from entering rooms of known or suspected cases of COVID-19 patients. Alternative communications should be encouraged, for example by use of mobile phones. Exceptions only for end-of-life situation and children requiring emotional care. At these times, PPE should be used by visitors.
- All visitors should be scheduled and controlled, and once inside the facility, instructed to limit their movement.

- Visitors should be asked to watch out for symptoms and report signs of acute illness for at least 14 days.

Construction Settings in Areas of Confirmed Cases of COVID-19

1. Minimize Chance of Exposure

- Any worker showing symptoms of respiratory illness (fever + cold or cough) and has potentially been exposed to COVID-19 should be immediately removed from the site and tested for the virus at the nearest local hospital
- Close co-workers and those sharing accommodations with such a worker should also be removed from the site and tested
- Project management must identify the closest hospital that has testing facilities in place, refer workers, and pay for the test if it is not free
- Persons under investigation for COVID-19 should not return to work at the project site until cleared by test results. During this time, they should continue to be paid daily wages
- If a worker is found to have COVID-19, wages should continue to be paid during the worker's convalescence (whether at home or in a hospital)
- If project workers live at home, any worker with a family member who has a confirmed or suspected case of COVID-19 should be quarantined from the project site for 14 days, and continued to be paid daily wages, even if they have no symptoms.

2. Training of Staff and Precautions

- Train all staff in the signs and symptoms of COVID-19, how it is spread, how to protect themselves and the need to be tested if they have symptoms. Allow Q&A and dispel any myths.
- Use existing grievance procedures to encourage reporting of co-workers if they show outward symptoms, such as ongoing and severe coughing with fever, and do not voluntarily submit to testing
- Supply face masks and other relevant PPE to all project workers at the entrance to the project site. Any persons with signs of respiratory illness that is not accompanied by fever should be mandated to wear a face mask
- Provide handwash facilities, hand soap, alcohol-based hand sanitizer and mandate their use on entry and exit of the project site and during breaks, via the use of simple signs with images in local languages
- Train all workers in respiratory hygiene, cough etiquette and hand hygiene using demonstrations and participatory methods
- Train cleaning staff in effective cleaning procedures and disposal of rubbish

3. Managing Access and Spread

- Should a case of COVID-19 be confirmed in a worker on the project site, visitors should be restricted from the site and worker groups should be isolated from each other as much as possible;

Extensive cleaning procedures with high-alcohol content cleaners should be undertaken in the area of the site where the worker was present, prior to any further work being undertaken in that area.

WATER, SANITATION AND HYGIENE (WASH) PROTOCOLS FOR HEALTHCARE FACILITIES TREATING COVID-19 PATIENTS

(Adapted from WHO/UNICEF Water, sanitation, hygiene, and waste management for the COVID-19 virus (Interim guidance) 2019)

The following actions are particularly important: (i) managing excreta (faeces and urine) safely, including ensuring that no one comes into contact with it and that it is treated and disposed of correctly; (ii) engaging in frequent hand hygiene using appropriate techniques; (iii) implementing regular cleaning and disinfection practices; and (iv) safely managing health care waste. Other important measures include providing sufficient safe drinking-water to staff, caregivers, and patients; ensuring that personal hygiene can be maintained, including hand hygiene, for patients, staff and caregivers; regularly laundering bed sheets and patients' clothing; providing adequate and accessible toilets (including separate facilities for confirmed and suspected cases of COVID-19 infection); and segregating and safely disposing of health care waste.

1. Hand hygiene practices:

If hands are not visibly dirty, the preferred method is to perform hand hygiene with an alcohol-based hand rub for 20–30 seconds using the appropriate technique. When hands are visibly dirty, they should be washed with soap and water for 40–60 seconds using the appropriate technique. Hand hygiene should be performed at all five moments, including before putting on PPE and after removing it, when changing gloves, after any contact with a patient with suspected or confirmed COVID-19 infection or their waste, after contact with any respiratory secretions, before eating, and after using the toilet. If an alcohol-based hand rub and soap are not available, then using chlorinated water (0.05%) for hand washing is an option, but it is not ideal because frequent use may lead to dermatitis, which could increase the risk of infection and asthma and because prepared dilutions might be inaccurate. However, if other options are not available or feasible, using chlorinated water for hand washing is an option. Functional hand hygiene facilities should be present for all health care workers at all points of care and in areas where PPE is put on or taken off. In addition, functional hand hygiene facilities should be available for all patients, family members, and visitors, and should be available within 5 m of toilets, as well as in waiting and dining rooms and other public areas.

2. Sanitation and plumbing

People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine that has 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, the toilet should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (gown, gloves, boots, mask, and a face shield or goggles). Further, and consistent with existing guidance, staff and health care workers should have toilet facilities that are separate from those used by all patients. WHO recommends the use of standard, well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized faecal matter from entering the plumbing or ventilation system, together with standard wastewater treatment. If HCF are connected to sewers, a risk assessment should be conducted to confirm that wastewater is contained within the system (that is, the system does not leak) before its arrival at a functioning treatment or disposal site, or both. For smaller HCF in low-resource settings, if space and local conditions allow, pit latrines may be the preferred option. Standard precautions should be taken to prevent

contamination of the environment by excreta. These precautions include ensuring that at least 1.5 m exists between the bottom of the pit and the groundwater table (more space should be allowed in coarse sands, gravels, and fissured formations) and that the latrines are located at least 30 m horizontally from any groundwater source (including both shallow wells and boreholes). If there is a high groundwater table or a lack of space to dig pits, excreta should be retained in impermeable storage containers and left for as long as feasible to allow for a reduction in virus levels before moving it off-site for additional treatment or safe disposal, or both. A two-tank system with parallel tanks would help facilitate inactivation by maximizing retention times, as one tank could be used until full, then allowed to sit while the next tank is being filled. Particular care should be taken to avoid splashing and the release of droplets while cleaning or emptying tanks.

3. Toilets and the handling of faeces

It is critical to conduct hand hygiene when there is suspected or direct contact with faeces (if hands are dirty, then soap and water are preferred to the use of an alcohol-based hand rub). If the patient is unable to use a latrine, excreta should be collected in either a diaper or a clean bedpan and immediately and carefully disposed of into a separate toilet or latrine used only by suspected or confirmed cases of COVID-19. In all health care settings, including those with suspected or confirmed COVID-19 cases, faeces must be treated as a biohazard and handled as little as possible. Anyone handling faeces should follow WHO contact and droplet precautions and use PPE to prevent exposure, including long-sleeved gowns, gloves, boots, masks, and goggles or a face shield. If diapers are used, they should be disposed of as infectious waste as they would be in all situations. Workers should be properly trained in how to put on, use, and remove PPE so that these protective barriers are not breached. If PPE is not available or the supply is limited, hand hygiene should be regularly practiced, and workers should keep at least 1 m distance from any suspected or confirmed cases. If a bedpan is used, after disposing of excreta from it, the bedpan should be cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, and then rinsed with clean water; the rinse water should be disposed of in a drain or a toilet or latrine. Other effective disinfectants include commercially available quaternary ammonium compounds, such as cetylpyridinium chloride, used according to manufacturer's instructions, and peracetic or peroxyacetic acid at concentrations of 500–2000 mg/L. Chlorine is ineffective for disinfecting media containing large amounts of solid and dissolved organic matter. Therefore, there is limited benefit to adding chlorine solution to fresh excreta and it is possible that this may introduce risks associated with splashing.

4. Emptying latrines and holding tanks, and transporting excreta off-site.

There is no reason to empty latrines and holding tanks of excreta from suspected or confirmed COVID-19 cases unless they are at capacity. Latrines or holding tanks should be designed to meet patient demand, considering potential sudden increases in cases, and there should be a regular schedule for emptying them based on the wastewater volumes generated. PPE (long-sleeved gown, gloves, boots, masks, and goggles or a face shield) should be worn at all times when handling or transporting excreta offsite, and great care should be taken to avoid splashing. For crews, this includes pumping out tanks or unloading pumper trucks. After handling the waste and once there is no risk of further exposure, individuals should safely remove their PPE and perform hand hygiene before entering the transport vehicle. Soiled PPE should be put in a sealed bag for later safe laundering (see Cleaning practices). Where there is no off-site treatment, in-situ treatment can be done using lime. Such treatment involves using a 10% lime slurry added at 1-part lime slurry per 10 parts of waste.

5. Cleaning practices

Laundry should be done and surfaces in all environments in which COVID-19 patients receive care (treatment units, community care centres) should be cleaned at least once a day and when a patient is discharged. Many disinfectants are active against enveloped viruses, such as the COVID-19 virus, including commonly used hospital disinfectants. Currently, WHO recommends using:

- 70% ethyl alcohol to disinfect small areas between uses, such as reusable dedicated equipment (for example, thermometers);
- sodium hypochlorite at 0.5% (equivalent to 5000 ppm) for disinfecting surfaces.

All individuals dealing with soiled bedding, towels, and clothes from patients with COVID-19 infection should wear appropriate PPE before touching soiled items, including heavy duty gloves, a mask, eye protection (goggles or a face shield), a long-sleeved gown, an apron if the gown is not fluid resistant, and boots or closed shoes. They should perform hand hygiene after exposure to blood or body fluids and after removing PPE. Soiled linen should be placed in clearly labelled, leak-proof bags or containers, after carefully removing any solid excrement and putting it in a covered bucket to be disposed of in a toilet or latrine. Machine washing with warm water at 60–90°C (140–194°F) with laundry detergent is recommended. The laundry can then be dried according to routine procedures. If machine washing is not possible, linens can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing. The drum should then be emptied, and the linens soaked in 0.05% chlorine for approximately 30 minutes. Finally, the laundry should be rinsed with clean water and the linens allowed to dry fully in sunlight. If excreta are on surfaces (such as linens or the floor), the excreta should be carefully removed with towels and immediately safely disposed of in a toilet or latrine. If the towels are single use, they should be treated as infectious waste; if they are reusable, they should be treated as soiled linens. The area should then be cleaned and disinfected (with, for example, 0.5% free chlorine solution), following published guidance on cleaning and disinfection procedures for spilled body fluids.

6. Safely disposing of greywater or water from washing PPE, surfaces and floors.

Current WHO recommendations are to clean utility gloves or heavy duty, reusable plastic aprons with soap and water and then decontaminate them with 0.5% sodium hypochlorite solution after each use. Single-use gloves (nitrile or latex) and gowns should be discarded after each use and not reused; hand hygiene should be performed after PPE is removed. If greywater includes disinfectant used in prior cleaning, it does not need to be chlorinated or treated again. However, it is important that such water is disposed of in drains connected to a septic system or sewer or in a soakaway pit. If greywater is disposed of in a soakaway pit, the pit should be fenced off within the health facility grounds to prevent tampering and to avoid possible exposure in the case of overflow.

7. Safe management of health care waste

Best practices for safely managing health care waste should be followed, including assigning responsibility and sufficient human and material resources to dispose of such waste safely. All health care waste produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated, and then safely disposed of or treated, or both, preferably onsite. If waste is moved off-site, it is critical to understand where and how it will be treated and destroyed. All who handle health care waste should wear appropriate PPE (boots, apron, long-sleeved gown, thick gloves, mask, and goggles or a face shield) and perform hand hygiene after removing it.

RESOURCE LIST: COVID-19 GUIDANCE

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, 2007

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

**ESF/SAFEGUARDS INTERIM NOTE:
COVID-19 CONSIDERATIONS IN CONSTRUCTION/CIVIL WORKS PROJECTS**

This note was issued on April 7, 2020 and includes links to the latest guidance as of this date (e.g. from WHO). Given the COVID-19 situation is rapidly evolving, when using this note it is important to check whether any updates to these external resources have been issued.

1. INTRODUCTION

The COVID-19 pandemic presents Governments with unprecedented challenges. Addressing COVID-19 related issues in both existing and new operations starts with recognizing that this is not business as usual and that circumstances require a highly adaptive responsive management design to avoid, minimize and manage what may be a rapidly evolving situation. In many cases, we will ask Borrowers to use reasonable efforts in the circumstances, recognizing that what may be possible today may be different next week (both positively, because more supplies and guidance may be available, and negatively, because the spread of the virus may have accelerated).

This interim note is intended to provide guidance to teams on how to support Borrowers in addressing key issues associated with COVID-19, and consolidates the advice that has already been provided over the past month. As such, it should be used in place of other guidance that has been provided to date. This note will be developed as the global situation and the Bank's learning (and that of others) develops. This is not a time when 'one size fits all'. More than ever, teams will need to work with Borrowers and projects to understand the activities being carried out and the risks that these activities may entail. Support will be needed in designing mitigation measures that are implementable in the context of the project. These measures will need to take into account capacity of the Government agencies, availability of supplies and the practical challenges of operations on-the-ground, including stakeholder engagement, supervision and monitoring. In many circumstances, communication itself may be challenging, where face-to-face meetings are restricted or prohibited, and where IT solutions are limited or unreliable.

This note emphasizes the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination, and the need for high levels of responsiveness in a changing environment. It recommends assessing the current situation of the project, putting in place mitigation measures to avoid or minimize the chance of infection, and planning what to do if either project workers become infected or the work force includes workers from proximate communities affected by COVID-19. In many projects, measures to avoid or minimize will need to be implemented at the same time as dealing with sick workers and relations with the community, some of whom may also be ill or concerned about infection. Borrowers should understand the obligations that contractors have under their existing contracts (see Section 3), require contractors to put in place appropriate organizational structures (see Section 4) and develop procedures to address different aspects of COVID-19 (see Section 5).

2. CHALLENGES WITH CONSTRUCTION/CIVIL WORKS

Projects involving construction/civil works frequently involve a large work force, together with suppliers and supporting functions and services. The work force may comprise workers from international, national, regional, and local labor markets. They may need to live in on-site accommodation, lodge within communities close to work sites or return to their homes after work. There may be different contractors permanently present on site, carrying out different activities, each with their own dedicated workers. Supply chains may involve international, regional and national suppliers facilitating the regular flow of goods and services to the project (including supplies essential to the project such as fuel, food, and water). As such there will also be regular flow of parties entering and exiting the site; support services, such as catering, cleaning services, equipment, material and supply deliveries, and specialist sub-contractors, brought in to deliver specific elements of the works.

Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is extremely serious, as are the implications of such a spread. Projects may experience large numbers of the work force becoming ill, which will strain the project's health facilities, have implications for local emergency and health services and may jeopardize the progress of the construction work and the schedule of the project. Such impacts will be exacerbated where a work force is large and/or the project is in remote or under-serviced areas. In such circumstances, relationships with the community can be strained or difficult and conflict can arise, particularly if people feel they are being exposed to disease by the project or are having to compete for scarce resources. The project must also exercise appropriate precautions against introducing the infection to local communities.

3. DOES THE CONSTRUCTION CONTRACT COVER THIS SITUATION?

Given the unprecedented nature of the COVID-19 pandemic, it is unlikely that the existing construction/civil works contracts will cover all the things that a prudent contractor will need to do. Nevertheless, the first place for a Borrower to start is with the contract, determining what a contractor's existing obligations are, and how these relate to the current situation.

The obligations on health and safety will depend on what kind of contract exists (between the Borrower and the main contractor; between the main contractors and the sub-contractors). It will differ if the Borrower used the World Bank's standard procurement documents (SPDs) or used national bidding documents. If a FIDIC document has been used, there will be general provisions relating to health and safety. For example, the standard FIDIC, Conditions of Contract for Construction (Second Edition 2017), which contains no 'ESF enhancements', states (in the General Conditions, clause 6.7) that the Contractor will be required:

- to take all necessary precautions to maintain the health and safety of the Contractor's Personnel
- to appoint a health and safety officer at site, who will have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorized to enter and or work on the site and to take protective measures to prevent accidents
- to ensure, in collaboration with local health authorities, that medical staff, first aid facilities, sick bay, ambulance services and any other medical services specified are available at all times at the site and at any accommodation
- to ensure suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics

These requirements have been enhanced through the introduction of the ESF into the SPDs (edition dated July 2019). The general FIDIC clause referred to above has been strengthened to reflect the requirements of the ESF. Beyond FIDIC's general requirements discussed above, the Bank's Particular Conditions include a number of relevant requirements on the Contractor, including:

- to provide health and safety training for Contractor's Personnel (which include project workers and all personnel that the Contractor uses on site, including staff and other employees of the Contractor and Subcontractors and any other personnel assisting the Contractor in carrying out project activities)
- to put in place workplace processes for Contractor's Personnel to report work situations that are not safe or healthy
- gives Contractor's Personnel the right to report work situations which they believe are not safe or healthy, and to remove themselves from a work situation which they have a reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves)
- requires measures to be in place to avoid or minimize the spread of diseases including measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent contract-related labor
- to provide an easily accessible grievance mechanism to raise workplace concerns

Where the contract form used is FIDIC, the Borrower (as the Employer) will be represented by the Engineer (also referred to in this note as the Supervising Engineer). The Engineer will be authorized to exercise authority specified in or necessarily implied from the construction contract. In such cases, the Engineer (through its staff on site) will be the interface between the PIU and the Contractor. It is important therefore to understand the scope of the Engineer's responsibilities. It is also important to recognize that in the case of infectious diseases such as COVID-19, project management – through the Contractor/subcontractor hierarchy – is only as effective as the weakest link. A thorough review of management procedures/plans as they will be implemented through the entire contractor hierarchy is important. Existing contracts provide the outline of this structure; they form the basis for the Borrower to understand how proposed mitigation measures will be designed and how adaptive management will be implemented, and to start a conversation with the Contractor on measures to address COVID-19 in the project.

4. WHAT PLANNING SHOULD THE BORROWER BE DOING?

Task teams should work with Borrowers (PIUs) to confirm that projects (i) are taking adequate precautions to prevent or minimize an outbreak of COVID-19, and (ii) have identified what to do in the event of an outbreak. Suggestions on how to do this are set out below:

- The PIU, either directly or through the Supervising Engineer, should request details in writing from the main Contractor of the measures being taken to address the risks. As stated in Section 3, the construction contract should include health and safety requirements, and these can be used as the basis for identification of, and requirements to implement, COVID-19 specific measures. The measures may be presented as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures. The measures may be reflected in revisions to the project's health and safety manual. This request should be made in writing (following any relevant procedure set out in the contract between the Borrower and the contractor).

- In making the request, it may be helpful for the PIU to specify the areas that should be covered. This should include the items set out in Section 5 below and take into account current and relevant guidance provided by national authorities, WHO and other organizations. See the list of references in the Annex to this note.
- The PIU should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing the agreed measures.
- Where possible, a senior person should be identified as a focal point to deal with COVID-19 issues. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site and the local community. It is also advisable to designate at least one back-up person, in case the focal point becomes ill; that person should be aware of the arrangements that are in place.
- On sites where there are a number of contractors and therefore (in effect) different work forces, the request should emphasize the importance of coordination and communication between the different parties. Where necessary, the PIU should request the main contractor to put in place a protocol for regular meetings of the different contractors, requiring each to appoint a designated staff member (with back up) to attend such meetings. If meetings cannot be held in person, they should be conducted using whatever IT is available. The effectiveness of mitigation measures will depend on the weakest implementation, and therefore it is important that all contractors and sub-contractors understand the risks and the procedure to be followed.
- The PIU, either directly or through the Supervising Engineer, may provide support to projects in identifying appropriate mitigation measures, particularly where these will involve interface with local services, in particular health and emergency services. In many cases, the PIU can play a valuable role in connecting project representatives with local Government agencies, and helping coordinate a strategic response, which takes into account the availability of resources. To be most effective, projects should consult and coordinate with relevant Government agencies and other projects in the vicinity.
- Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project to address COVID-19 related issues, how procedures are being implemented, and concerns about the health of their co-workers and other staff.

5. WHAT SHOULD THE CONTRACTOR COVER?

The Contractor should identify measures to address the COVID-19 situation. What will be possible will depend on the context of the project: the location, existing project resources, availability of supplies, capacity of local emergency/health services, the extent to which the virus already exist in the area. A systematic approach to planning, recognizing the challenges associated with rapidly changing circumstances, will help the project put in place the best measures possible to address the situation. As discussed above, measures to address COVID-19 may be presented in different ways (as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures).

PIUs and contractors should refer to guidance issued by relevant authorities, both national and international (e.g. WHO), which is regularly updated (see sample References and links provided in the Annex).

Addressing COVID-19 at a project site goes beyond occupational health and safety, and is a broader project issue which will require the involvement of different members of a project management team. In many cases, the most effective approach will be to establish procedures to address the issues, and then to ensure that these procedures are implemented systematically. Where appropriate given the project context, a designated team should be established to address COVID-19 issues, including PIU representatives, the Supervising Engineer, management (e.g. the project manager) of the contractor and sub-contractors, security, and medical and OHS professionals. Procedures should be clear and straightforward, improved as necessary, and supervised and monitored by the COVID-19 focal point(s). Procedures should be documented, distributed to all contractors, and discussed at regular meetings to facilitate adaptive management. The issues set out below include a number that represent expected good workplace management but are especially pertinent in preparing the project response to COVID-19.

(a) ASSESSING WORKFORCE CHARACTERISTICS

Many construction sites will have a mix of workers e.g. workers from the local communities; workers from a different part of the country; workers from another country. Workers will be employed under different terms and conditions and be accommodated in different ways. Assessing these different aspects of the workforce will help in identifying appropriate mitigation measures:

- The Contractor should prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations (e.g. 4 weeks on, 4 weeks off).
- This should include a breakdown of workers who reside at home (i.e. workers from the community), workers who lodge within the local community and workers in on-site accommodation. Where possible, it should also identify workers that may be more at risk from COVID-19, those with underlying health issues or who may be otherwise at risk.
- Consideration should be given to ways in which to minimize movement in and out of site. This could include lengthening the term of existing contracts, to avoid workers returning home to affected areas, or returning to site from affected areas.
- Workers accommodated on site should be required to minimize contact with people near the site, and in certain cases be prohibited from leaving the site for the duration of their contract, so that contact with local communities is avoided.
- Consideration should be given to requiring workers lodging in the local community to move to site accommodation (subject to availability) where they would be subject to the same restrictions.
- Workers from local communities, who return home daily, weekly or monthly, will be more difficult to manage. They should be subject to health checks at entry to the site (as set out above) and at some point, circumstances may make it necessary to require them to either use accommodation on site or not to come to work.

(b) ENTRY/EXIT TO THE WORK SITE AND CHECKS ON COMMENCEMENT OF WORK

Entry/exit to the work site should be controlled and documented for both workers and other parties, including support staff and suppliers. Possible measures may include:

- Establishing a system for controlling entry/exit to the site, securing the boundaries of the site, and establishing designating entry/exit points (if they do not already exist). Entry/exit to the site should be documented.
- Training security staff on the (enhanced) system that has been put in place for securing the site and controlling entry and exit, the behaviors required of them in enforcing such system and any COVID - 19 specific considerations.
- Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks and recording details of any worker that is denied entry.
- Confirming that workers are fit for work before they enter the site or start work. While procedures should already be in place for this, special attention should be paid to workers with underlying health issues or who may be otherwise at risk. Consideration should be given to demobilization of staff with underlying health issues.
- Checking and recording temperatures of workers and other people entering the site or requiring self-reporting prior to or on entering the site.
- Providing daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures, using demonstrations and participatory methods.
- During the daily briefings, reminding workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor or the COVID-19 focal point if they have symptoms or are feeling unwell.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Preventing a sick worker from entering the site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days.

(c) GENERAL HYGIENE

Requirements on general hygiene should be communicated and monitored, to include:

- Training workers and staff on site on the signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms (for further information see [WHO COVID-19 advice for the public](#)).
- Placing posters and signs around the site, with images and text in local languages.
- Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol based sanitizer (if available, 60-95% alcohol) can also be used.
- Review worker accommodations, and assess them in light of the requirements set out in [IFC/EBRD guidance on Workers' Accommodation: processes and standards](#), which provides valuable guidance as to good practice for accommodation.
- Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected (see paragraph (f)).

(d) CLEANING AND WASTE DISPOSAL

Conduct regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces. Review cleaning protocols for key construction equipment (particularly if it is being operated by different workers). This should include:

- Providing cleaning staff with adequate cleaning equipment, materials and disinfectant.
- Review general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.
- Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, cleaners should be provided with best available alternatives.
- Training cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).
- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO). If open burning and incineration of medical wastes is necessary, this should be for as limited a duration as possible. Waste should be reduced and segregated, so that only the smallest amount of waste is incinerated (for further information [see WHO interim guidance on water, sanitation and waste management for COVID-19](#)).

(e) ADJUSTING WORK PRACTICES

Consider changes to work processes and timings to reduce or minimize contact between workers, recognizing that this is likely to impact the project schedule. Such measures could include:

- Decreasing the size of work teams.
- Limiting the number of workers on site at any one time.
- Changing to a 24-hour work rotation.
- Adapting or redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes.
- Continuing with the usual safety trainings, adding COVID-19 specific considerations. Training should include proper use of normal PPE. While as of the date of this note, general advice is that construction workers do not require COVID-19 specific PPE, this should be kept under review (for further information see [WHO interim guidance on rational use of personal protective equipment \(PPE\) for COVID-19](#)).
- Reviewing work methods to reduce use of construction PPE, in case supplies become scarce or the PPE is needed for medical workers or cleaners. This could include, e.g. trying to reduce the need for dust masks by checking that water sprinkling systems are in good working order and are maintained or reducing the speed limit for haul trucks.
- Arranging (where possible) for work breaks to be taken in outdoor areas within the site.
- Consider changing canteen layouts and phasing meal times to allow for social distancing and phasing access to and/or temporarily restricting access to leisure facilities that may exist on site, including gyms.
- At some point, it may be necessary to review the overall project schedule, to assess the extent to which it needs to be adjusted (or work stopped completely) to reflect prudent work practices, potential exposure of both workers and the community and availability of supplies, taking into account Government advice and instructions.

(f) PROJECT MEDICAL SERVICES

Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures and training. Where these are not adequate, consider upgrading services where possible, including:

- Expanding medical infrastructure and preparing areas where patients can be isolated. Guidance on setting up isolation facilities is set out in WHO interim guidance on considerations for quarantine of individuals in the context of containment for COVID-19. Isolation facilities should be located away from worker accommodation and ongoing work activities. Where possible, workers should be provided with a single well-ventilated room (open windows and door). Where this is not possible, isolation facilities should allow at least 1 meter between workers in the same room, separating workers with curtains, if possible. Sick workers should limit their movements, avoiding common areas and facilities and not be allowed visitors until they have been clear of symptoms for 14 days. If they need to use common areas and facilities (e.g. kitchens or canteens), they should only do so when unaffected workers are not present and the area/facilities should be cleaned prior to and after such use.
- Training medical staff, which should include current WHO advice on COVID-19 and recommendations on the specifics of COVID-19. Where COVID-19 infection is suspected, medical providers on site should follow WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected.
- Training medical staff in testing, if testing is available.
- Assessing the current stock of equipment, supplies and medicines on site, and obtaining additional stock, where required and possible. This could include medical PPE, such as gowns, aprons, medical masks, gloves, and eye protection. Refer to WHO guidance as to what is advised (for further information see WHO interim guidance on rational use of personal protective equipment (PPE) for COVID-19).
- If PPE items are unavailable due to world-wide shortages, medical staff on the project should agree on alternatives and try to procure them. Alternatives that may commonly be found on construction sites include dust masks, construction gloves and eye goggles. While these items are not recommended, they should be used as a last resort if no medical PPE is available.
- Ventilators will not normally be available on work sites, and in any event, intubation should only be conducted by experienced medical staff. If a worker is extremely ill and unable to breathe properly on his or her own, they should be referred immediately to the local hospital (see (g) below).
- Review existing methods for dealing with medical waste, including systems for storage and disposal (for further information see WHO interim guidance on water, sanitation and waste management for COVID-19, and WHO guidance on safe management of wastes from health-care activities).

(g) LOCAL MEDICAL AND OTHER SERVICES

Given the limited scope of project medical services, the project may need to refer sick workers to local medical services. Preparation for this includes:

- Obtaining information as to the resources and capacity of local medical services (e.g. number of beds, availability of trained staff and essential supplies).
- Conducting preliminary discussions with specific medical facilities, to agree what should be done in the event of ill workers needing to be referred.

- Considering ways in which the project may be able to support local medical services in preparing for members of the community becoming ill, recognizing that the elderly or those with pre-existing medical conditions require additional support to access appropriate treatment if they become ill.
- Clarifying the way in which an ill worker will be transported to the medical facility, and checking availability of such transportation.
- Establishing an agreed protocol for communications with local emergency/medical services.
- Agreeing with the local medical services/specific medical facilities the scope of services to be provided, the procedure for in-take of patients and (where relevant) any costs or payments that may be involved.
- A procedure should also be prepared so that project management knows what to do in the unfortunate event that a worker ill with COVID-19 dies. While normal project procedures will continue to apply, COVID-19 may raise other issues because of the infectious nature of the disease. The project should liaise with the relevant local authorities to coordinate what should be done, including any reporting or other requirements under national law.

(h) INSTANCES OR SPREAD OF THE VIRUS

WHO provides detailed advice on what should be done to treat a person who becomes sick or displays symptoms that could be associated with the COVID-19 virus (for further information see [WHO interim guidance on infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#)). The project should set out risk-based procedures to be followed, with differentiated approaches based on case severity (mild, moderate, severe, critical) and risk factors (such as age, hypertension, diabetes) (for further information see [WHO interim guidance on operational considerations for case management of COVID-19 in health facility and community](#)). These may include the following:

- If a worker has symptoms of COVID-19 (e.g. fever, dry cough, fatigue) the worker should be removed immediately from work activities and isolated on site.
- If testing is available on site, the worker should be tested on site. If a test is not available at site, the worker should be transported to the local health facilities to be tested (if testing is available).
- If the test is positive for COVID-19 or no testing is available, the worker should continue to be isolated. This will either be at the work site or at home. If at home, the worker should be transported to their home in transportation provided by the project.
- Extensive cleaning procedures with high-alcohol content disinfectant should be undertaken in the area where the worker was present, prior to any further work being undertaken in that area. Tools used by the worker should be cleaned using disinfectant and PPE disposed of.
- Co-workers (i.e. workers with whom the sick worker was in close contact) should be required to stop work, and be required to quarantine themselves for 14 days, even if they have no symptoms.
- Family and other close contacts of the worker should be required to quarantine themselves for 14 days, even if they have no symptoms.
- If a case of COVID-19 is confirmed in a worker on the site, visitors should be restricted from entering the site and worker groups should be isolated from each other as much as possible.
- If workers live at home and has a family member who has a confirmed or suspected case of COVID-19, the worker should quarantine themselves and not be allowed on the project site for 14 days, even if they have no symptoms.
- Workers should continue to be paid throughout periods of illness, isolation or quarantine, or if they are required to stop work, in accordance with national law.
- Medical care (whether on site or in a local hospital or clinic) required by a worker should be paid for by the employer.

(i) CONTINUITY OF SUPPLIES AND PROJECT ACTIVITIES

Where COVID-19 occurs, either in the project site or the community, access to the project site may be restricted, and movement of supplies may be affected.

- Identify back-up individuals, in case key people within the project management team (PIU, Supervising Engineer, Contractor, sub-contractors) become ill, and communicate who these are so that people are aware of the arrangements that have been put in place.
- Document procedures, so that people know what they are, and are not reliant on one person's knowledge.
- Understand the supply chain for necessary supplies of energy, water, food, medical supplies and cleaning equipment, consider how it could be impacted, and what alternatives are available. Early proactive review of international, regional and national supply chains, especially for those supplies that are critical for the project, is important (e.g. fuel, food, medical, cleaning and other essential supplies). Planning for a 1-2 month interruption of critical goods may be appropriate for projects in more remote areas.
- Place orders for/procure critical supplies. If not available, consider alternatives (where feasible).
- Consider existing security arrangements, and whether these will be adequate in the event of interruption to normal project operations.
- Consider at what point it may become necessary for the project to significantly reduce activities or to stop work completely, and what should be done to prepare for this, and to re-start work when it becomes possible or feasible.

(j) TRAINING AND COMMUNICATION WITH WORKERS

Workers need to be provided with regular opportunities to understand their situation, and how they can best protect themselves, their families and the community. They should be made aware of the procedures that have been put in place by the project, and their own responsibilities in implementing them.

- It is important to be aware that in communities close to the site and amongst workers without access to project management, social media is likely to be a major source of information. This raises the importance of regular information and engagement with workers (e.g. through training, town halls, tool boxes) that emphasizes what management is doing to deal with the risks of COVID-19. Allaying fear is an important aspect of work force peace of mind and business continuity. Workers should be given an opportunity to ask questions, express their concerns, and make suggestions.
- Training of workers should be conducted regularly, as discussed in the sections above, providing workers with a clear understanding of how they are expected to behave and carry out their work duties.
- Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work.
- Training should cover all issues that would normally be required on the work site, including use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.
- Communications should be clear, based on fact and designed to be easily understood by workers, for example by displaying posters on handwashing and social distancing, and what to do if a worker displays symptoms.

(k) COMMUNICATION AND CONTACT WITH THE COMMUNITY

Relations with the community should be carefully managed, with a focus on measures that are being implemented to safeguard both workers and the community. The community may be concerned about the presence of non-local workers, or the risks posed to the community by local workers presence on the project site. The project should set out risk-based procedures to be followed , which may reflect WHO guidance (for further information see WHO Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response). The following good practice should be considered:

- Communications should be clear, regular, based on fact and designed to be easily understood by community members.
- Communications should utilize available means. In most cases, face-to-face meetings with the community or community representatives will not be possible. Other forms of communication should be used; posters, pamphlets, radio, text message, electronic meetings. The means used should take into account the ability of different members of the community to access them, to make sure that communication reaches these groups.
- The community should be made aware of procedures put in place at site to address issues related to COVID-19. This should include all measures being implemented to limit or prohibit contact between workers and the community. These need to be communicated clearly, as some measures will have financial implications for the community (e.g. if workers are paying for lodging or using local facilities). The community should be made aware of the procedure for entry/exit to the site, the training being given to workers and the procedure that will be followed by the project if a worker becomes sick.
- If project representatives, contractors or workers are interacting with the community, they should practice social distancing and follow other COVID-19 guidance issued by relevant authorities, both national and international (e.g. WHO).

6. EMERGENCY POWERS AND LEGISLATION

Many Borrowers are enacting emergency legislation. The scope of such legislation, and the way it interacts with other legal requirements, will vary from country to country. Such legislation can cover a range of issues, for example:

- Declaring a public health emergency
- Authorizing the use of police or military in certain activities (e.g. enforcing curfews or restrictions on movement)
- Ordering certain categories of employees to work longer hours, not to take holiday or not to leave their job (e.g. health workers)
- Ordering non-essential workers to stay at home, for reduced pay or compulsory holiday

Except in exceptional circumstances (after referral to the World Bank's Operations Environmental and Social Review Committee (OESRC)), projects will need to follow emergency legislation to the extent that these are mandatory or advisable. It is important that the Borrower understands how mandatory requirements of the legislation will impact the project. Teams should require Borrowers (and in turn, Borrowers should request Contractors) to consider how the emergency legislation will impact the obligations of the Borrower set out in the legal agreement and the obligations set out in the construction contracts. Where the legislation requires a material departure from existing contractual obligations, this should be documented, setting out the relevant provisions.