

SOLOMON ISLANDS

MINISTRY OF HEALTH AND MEDICAL SERVICES



Solomon Islands COVID-19 Emergency Response Project

(Parent Project and Additional Finance)

World Bank: P173933

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

VERSION: DRAFT, 04 FEBRUARY2022

Table of Contents

List of Figures	5
List of Tables	5
1 Background	6
2 Project Description.....	6
2.1 Project Summary.....	6
2.2 Project Subcomponents.....	7
2.3 Summary of Key Project Subcomponent Activities	9
2.4 Project Area and Beneficiaries	11
3 Policy, Legal and Regulatory Framework.....	11
3.1 Country Context.....	11
3.1.1 Environmental Assessment, Review and Permitting	11
3.1.2 Health-care Regulatory and Policy Framework	15
3.1.3 Infection Prevention Control and Health Care Waste Management.....	16
3.1.4 Labour Legislation	17
3.2 World Bank Environmental and Social Standards.....	17
3.2.1 ESF Standards Relevant to the Project.....	17
3.2.2 World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines) relevant to the project	18
3.2.3 World Bank Response to COVID-19	19
3.3 Relevant International and Regional Agreements.....	19
3.4 Relevant Good International Industry Practice (GIIP).....	20
4 Environmental and Social Baselines	22
4.1 Socio-Economic Baseline	22
4.1.1 Population	22
4.1.2 Human Development Index	22
4.1.3 Indigenous People and Culture	23
4.1.4 Vulnerability.....	23
4.1.5 Economy.....	24
4.1.6 Health and Health-care Services	25
4.1.7 Education	26
4.1.8 Gender Based Violence	27
4.2 Environmental Baseline	28

4.2.1	Solid Waste Management.....	28
4.2.2	Asbestos	29
4.2.3	Health-care Waste Management.....	30
4.3	COVID-19 Status and Response	35
4.3.1	Current COVID-19 Status.....	35
4.3.2	National COVID-19 Preparedness and Response.....	35
4.3.3	Testing for COVID-19.....	36
4.3.4	Vaccine roll-out	37
4.3.5	Implementation of Parent Project to Date	38
5	Environment and Social Risks, Potential Impacts and Mitigation	38
5.1	Summary of Main Environmental Risks	38
5.2	Summary of Main Social Risks	39
5.3	Preliminary Risk Analysis.....	40
6	Procedures to Address Environmental and Social Issues	57
6.1	Overview of the Screening Process.....	57
6.2	Screening of Project Activities	57
6.3	Land Commitment Guide	62
7	Consultation and Stakeholder Engagement	62
7.1	Project Stakeholders	63
7.1.1	Affected Parties.....	63
7.1.2	Other Interested Parties	63
7.1.3	Vulnerable Groups	64
7.2	Consultation and Information Disclosure	64
7.2.1	Stakeholder Engagement during Project Preparation	64
7.2.2	Consultation and Disclosure during Project Implementation.....	64
7.3	Grievance Procedures	69
7.3.1	Grievance Mechanism.....	69
7.4	Monitoring and Reporting	69
8	Implementation Arrangements, Responsibilities and Capacity Building.....	70
8.1	Implementing Agency	70
8.2	Activity Level Environmental and Social Risk Management Responsibilities	72
8.3	World Bank Environmental and Social Team.....	73
8.4	Capacity Building.....	73

8.5	E&S Risk Management Budget.....	74
9	Annexes.....	77
Annex I.	Abbreviations and Acronyms	78
Annex II.	Code of Environmental and Social Practice (CoESP) for Civil Works	80
Annex III.	Chance Finds Procedure.....	98
Annex IV.	Screening Form for Potential Environmental and Social Issues.....	99
Annex V.	Environmental and Social Management Plan (ESMP) Template	104
Annex VI.	MHMS Infection Prevention and Control Guidelines (IPCG)	122
Annex VII.	Labour Management Procedure (LMP) <<insert once finalised>>	123
Annex VIII.	Resource List: COVID-19 Guidance	125
Annex IX.	Land Commitment Template	127
Annex X.	Terms of References for E&S Specialists in MHMS.....	129

List of Figures

Figure 1 - EIA procedural steps	13
Figure 2 – Key Activity Screening Steps	58
Figure 3 –Activity Screening Process	60

List of Tables

Table 1 - Components and Key Activities Cost Estimates	8
Table 2 – Summary of Proposed Project Activities	9
Table 3 – Legislation and Regulations Impacting Healthcare Waste Governance - Solomon Islands.....	16
Table 4 - Required Project Environmental and Social Standard Actions.....	17
Table 5 – WHO Guidelines for COVID-19.....	20
Table 6 –Solomon Islands’ Human Development Index Trends	22
Table 7 – Waste Management Processes Observed at Six Solomon Island Hospitals.....	32
Table 8 – Assessment of key project risks/impacts and proposed mitigation methods – planning and design stage	41
Table 9 – Assessment of key project risks/impacts and proposed mitigation methods – renovation/refurbishment/construction stage	47
Table 10 – Assessment of key project risks/impacts and proposed mitigation methods – operational stage.....	49
Table 11 - Ineligible Activity List	61
Table 12 - Project Consultation and Disclosure.....	65
Table 13 - ESMF Implementation Costs.....	76

1 Background

The Solomon Islands Government (SIG) initially secured US\$5 million International Development Association (IDA) credits allocated from the World Bank (WB) through the Fast Track Covid-19 Response Program for the COVID-19 Emergency Responses (the Parent Project). Additional Financing is also being sought from IDA (US\$5 million) and the WB's Health Emergency Preparedness and Response Trust Fund (HEPR) (US\$3 million).

The Parent Project and Additional Financing are together referred to as “the Project”. The Project reflects the emergency response under the COVID-19 Strategic Preparedness and Response Program (SPRP). The Project aims to prevent, detect and respond to the threat posed by COVID-19 and to strengthen national systems for public health preparedness in the Solomon Islands. The project coverage will be national in scale, but also includes support to selected Provinces.

This Environmental and Social Management Framework (ESMF) sets out the principles, policies and procedures for environmental and social protection that the SIG will employ in the context of the Project. The ESMF template for COVID-19 Response was used to guide the development of this ESMF. The rationale of using an ESMF instead of project-specific environmental and social assessment and management plans, is that the exact locations of project activities, as well as the type and magnitude of the environmental and social impacts will not be known until the project is at an advanced stage of implementation.

The purpose of the ESMF is to guide the Ministry of Health and Medical Services (MHMS), and any Sub-component project proponents, on the environmental and social screening processes and subsequent assessment during implementation, including activity-specific plans, in accordance with the World Bank Environmental and Social Framework (ESF). This ESMF was initially finalised in March 2021 and updated in February 2022 to reflect activities associated with the Additional Financing.

The scope of this ESMF includes procedures relevant to the development of all activities, including how to conduct screening of project activities to assess the environmental and social risks and impacts and identify mitigation measures, as part of activity-specific assessment and plans. This ESMF is supported by the MHMS Infection Prevention Control Guidelines (IPCG), and Projects Code of Environmental and Social Practice (CoESP), Labour Management Procedure (LMP), Stakeholder Engagement Plan (SEP), Project Operational Manual (POM) and other specific plans that have been or will be prepared for the Project. This ESMF will allow the SIG to clarify, to the extent possible and based on existing information, the approach that should be taken at the activity level, in accordance with the World Bank ESF.

2 Project Description

2.1 Project Summary

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

The PDO will be monitored through the following PDO level outcome indicators:

- Number of suspected cases of COVID-19 reported and investigated per approved national protocol;
- Number of acute healthcare facilities with isolation capacity.

The Project objectives are aligned to the results chain of the COVID-19 SPRP. This project is prepared under the global framework of the World Bank COVID-19 Response financed under the Fast Track COVID-19 Facility.

2.2 Project Subcomponents

The proposed project components and sub-components are described in the following sections. The breakdown of the funding (original funding and additional funding) by component is provided in Table 1.

Component 1 - Emergency COVID-19 Preparedness and Response

Subcomponent 1.1 – Support for General Health Response to COVID-19

This subcomponent provides immediate support to implement prevention, preparedness, and emergency response activities for COVID-19 in Solomon Islands at all levels of health facilities across all provinces, focusing on the following areas: (a) improving infection prevention and control measures by providing personal protective equipment to front line health workers (which are largely women, about 67%) as well as necessary supplies and consumables, including test kits and laboratory consumables; (b) upgrading quarantine facilities in areas bordering Papua New Guinea (Nila, Shortlands and Taro, Choiseul); and (c) isolation units at Good Samaritan and Atoifi hospitals to prepare for potential surge in demand to separate people who are ill with symptoms of COVID-19 and/or have tested positive; (d) mobilizing contractual health care workers (including laboratory technicians) to respond to a surge in demand for health care services, and general operating expenses for the response; and (e) operational expenses for the response efforts including gender-based violence (GBV) support in quarantine facilities and GBV messaging in all forms of community health outreach as part of the emergency response. In renovating and upgrading quarantine facilities and isolation units the project will implement climate change adaptation measures, including energy efficiency improvements such as sustainable cooling (with passive cooling as first option), renewable energy sources, energy efficient equipment, including low energy lightbulbs (LED lightbulbs) and replacement of old inefficient equipment, such as refrigerators and cooling systems, to mitigate the release of greenhouse gas (GHG) emissions.

Subcomponent 1.2 – Support to COVID-19 vaccine deployment

This subcomponent includes (a) allowances to support HR including vaccination deployment implementation; (b) logistical support for rollout (including boat) for Area Health Centre level health facilities (Afio, Manuopu, Avuavu, Paoe, Seghe, Atoifi, Helena Goldie, Kia and Makira Weather coast); procurement of vehicles; and operational and logistical support including safety/utilities for vaccination and deployment rollout; (c) demand generation and communication; and (d) operational costs associated with vaccine deployment. This subcomponent also includes support for community engagement linking to deployment in the Honiara and the provinces; and printing and publication support to meet printing costs of C19 Vax cards and registration forms.

Component 2 – Health Systems Strengthening

Subcomponent 2.1 – Support for health infrastructure development

This subcomponent supports health systems strengthening activities to ensure continuity of delivery of critical health services and to cope with the surge in demand for care posed by COVID-19. The activities include: (a) renovating and upgrading intensive care units and capacity building in two Provincial

hospitals (Tulagi and Helena Goldie hospitals); (b) enhancing health care waste management by financing energy efficient incinerators (the location for the incinerators to be supported under the project will be climate safe and determined by MHMS in accordance with criteria satisfactory to the World Bank, which will be elaborated in the Project Operations Manual (POM)); (c) transport for waste disposal; (d) supporting MHMS with establishing a national health emergency coordination center by financing upgrading and repurposing of existing building (Zome) currently used as temporary accommodation for health care workers. Currently the emergency operation center is housed at NRH; (e) training of health care workers in hospital infection control, disease surveillance (including climate-related infectious diseases and other climate related health outcomes) and health care waste management. All training for health workers will include a module on GBV to build capacity of staff to identify GBV cases, appropriately handle disclosure, and refer patients for additional services. The renovation and upgrading of existing health infrastructures (two provincial hospitals, NMS, and national health emergency coordination center) will consider a climate adaptive design features such as: passive ventilation for cooling, cooling vegetation, shutters on windows, for cooling and hence decreased need for energy use for air-conditioning, roof and wall insulation to buildings keep cool during heat events, flood protection in flood prone areas. This component will also finance goods for MHMS such as fuel-efficient trucks (where feasible there will be electric) for health care waste management, which contribute to climate change mitigation.

This subcomponent also includes (a) NMS expansion/refurbishment which may include additional funding support and top up to refurbishment of current medical stores; (b) strengthening pharmaceutical systems includes training/assets associated with the refurbished NMS facility.

Subcomponent 2.2 – Strengthen human resource systems and policy

This subcomponent includes (a) RDP implementation of system strengthening; (b) support for advocacy and implementation of the new upcoming Public Health Emergency Bill.

Component 3: Project Implementation Management, Monitoring and Evaluation (M&E)

This component supports the management and M&E of project activities and outputs. It will also finance capacity building activities to MHMS staff and consultants who will be directly involved in Project management and procurement of goods and consulting services. Key activities include: (a) financing interim support from an existing World Bank project's Project Management Unit (PMU), support for establishing a PMU in MHMS through contracting fiduciary staff, among others, capacity building for project management, financial management (FM), procurement, environmental and social management, training on climate change and sharing lessons learnt on climate change, and reporting; sharing lesson learnt from response exercises and joint learning with other Pacific countries; and operating expenses. This component also includes M&E (b), which will be implemented in coordination with technical departments responsible for implementing activities using the agreed M&E tools.

Table 1 - Components and Budget Allocations

Project Component	Budget (US\$ million)
Component 1: Emergency COVID-19 Preparedness and Response	
Initial funding	1.30
Additional Financing	5.26

Component 2: Health Systems Strengthening	
Initial funding	3.35
Additional Financing	1.81
Component 3: Project Implementation Management, Monitoring and Evaluation	
Initial funding	0.35
Additional Financing	0.93
Total	13.00

2.3 Summary of Key Project Subcomponent Activities

The project-supported activities include purchase of goods and equipment, existing facility refurbishments (including some demolition and reconstruction), provision of training, and operational costs for rapid response and surveillance. The main project activities will include provision of goods and supplies including Personal Protective Equipment (PPE), test kits and laboratory consumables; enhancing case detection, confirmation, and contact tracing capabilities; upgrading quarantine facilities and isolation units; mobilizing contractual health care workers; renovating and upgrading intensive care units (ICUs); enhancing health care waste management including the provision of incinerators; training in health care waste management; upgrading the national medical storage facility; supporting MHMS with establishing a national health emergency coordination center; training of health care workers in hospital infection control, and disease surveillance; procurement of vehicles for logistical support; and community engagement. The Project will not fund procurement of COVID-19 vaccines.

Some minor civil works associated with the installation of the incinerators and existing health centre refurbishments are expected. Minor civil works will be undertaken to expand treatment capacity by refurbishing existing ICU facilities within existing facilities, upgrading and repurposing an existing building to function as a national health emergency coordination centre, upgrading the existing central medicine store in Honiara and refurbishing other existing health facilities in the nominated five provinces. Larger-scale civil works may be required should existing health centers be demolished and reconstructed. However, these project activities are not expected to involve land acquisition, physical or economic displacement, or restriction of access to natural resources.

Energy efficient incinerators will be procured. The type of incinerators is yet to be determined but will include incinerators for Good Samaritan hospital (Guadalcanal), Hellena Goldie Hospital (Western Province), Tulagi hospital (Central Province), Atoifi Hospital (Malaita). Decisions on the procurement of new incinerators will be based on a feasibility study that will be undertaken during implementation. The review will also include assessments of possible repairs of malfunctioning units procured in 2015 under the Secretariat of the Pacific Regional Environment Programme (SPREP) PacWaste Project.

There will be no security personnel required the project. International security forces have recently been deployed to the Solomon Islands in response to unrest. Their role is to provide protection against any unrest, riots, or other disturbances and therefore if infrastructure or activities being funded by the Project are threatened, they may intervene as part of their overall role.

The general types of project activities can be summarized into the following general activities which will be assessed and screened for their environmental and social risks:

Table 2 – Summary of Proposed Project Activities

Project Activity	Description
Provision of goods and supplies	Includes PPE, test kits, and laboratory consumables – Subcomponent 1.1
	Procurement of a boat and vehicles – Subcomponents 1.2, 2.1
Renovations and refurbishments	Renovation of quarantine facilities in areas bordering Papua New Guinea - Subcomponent 1.1
	Renovation of isolation units at Good Samaritan and Atoifi hospitals - Subcomponent 1.1
	Renovation of ICUs in two Provincial hospitals (Tulagi and Helena Goldie hospitals) - Subcomponent 2.1
	Refurbishment of the national medical storage facility (NMS) by financing refurbishment of the warehouse – Subcomponent 2.1
	Refurbishment of the existing Zome building to establish a national health emergency coordination center (NHEC) - Subcomponent 2.1
	Renovation and rehabilitation activities at Tulagi hospital, Helena Goldie hospital, Good Samaritan hospital, Atoifi hospital, Zome - National Surveillance Unit, Wagina Area Health Centre, Taro Area Health Centre - Subcomponent 2.1
Capacity building and training	Enhancing case detection, confirmation, and contact tracing capabilities - Subcomponent 1.2
	HR support for vaccine deployment - Subcomponent 1.2
	Capacity building in two Provincial hospitals (Tulagi and Helena Goldie hospitals) - Subcomponent 2.1
	Training in health care waste management - Subcomponent 2.1
	Training of staff at the NMS on medical warehouse management - Component Subcomponent 2.1
	Training of health care workers in hospital infection control, and disease surveillance, GBV – Subcomponent 2.1
	Strengthening pharmaceutical systems includes training/assets associated with the refurbished NMS facility – Subcomponent 2.1
	Surge deployment capacity, including in-house local HR capacity enhancement - Subcomponent 1.1
	Ongoing support for Local Technical Support and assistance - Subcomponent 1.1
Enhancing health-care waste management	Financing energy efficient incinerators - Subcomponent 2.1
	Waste disposal transport, specifically four fuel-efficient trucks - Subcomponent 2.1
Community engagement	Support for community engagement related to vaccine deployment - Subcomponent 1.2
	Printing and publication support to meet printing costs of C19 Vax cards and registration forms - Subcomponent 1.2
Policy planning and coordination	Implementation of system strengthening - Subcomponent 2.2
	Support for advocacy and implementation of the new upcoming Public Health Emergency Bill - Subcomponent 2.2
	PMU support and operations – Component 3

Project management	Administration and logistics, including freight – Component 3
	Support for provincial monitoring missions – Component 3
	Support spot checks and audit as and when required and necessary – Component 3

2.4 Project Area and Beneficiaries

This emergency operation will be implemented at both national and provincial levels, with the participating provinces currently being Western Province, Malaita, Choiseul, Isabel, Central and Guadalcanal. Among others, the purchase of consumables is expected to cover all provinces under the central coordination of MHMS; while the infrastructure investments will largely focus on the provinces of Malaita, Choiseul, Isabel, Western and Guadalcanal (including Honiara).

The expected project beneficiaries will be the Solomon Islands population at large given the nature of the disease, infected people, at-risk populations, particularly the elderly and people with chronic conditions, medical and emergency personnel, medical and testing facilities (all levels), and public health agencies engaged in the response in participating countries.

3 Policy, Legal and Regulatory Framework

3.1 Country Context

3.1.1 Environmental Assessment, Review and Permitting

The SIG has a well-established regulatory framework that provides measures to protect and preserve the environment. The Environment Act 1998 and Environment Regulations 2008 make provision for the conservation and protection of the environment. This Act laid the foundation of Solomon Islands' environmental impacts assessment (EIA) system, which is implemented by the Environment Conservation Division (ECD) of the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM).

3.1.1.1 *Environment Act 1998*

The Environment Act 1998 (the Act) provides for the protection and conservation of the environment. The core objectives of the Act are to provide for and establish integrated systems of development control, EIA, and pollution control, including:

- Prevention, control and monitor pollution;
- Reducing risks to human health and prevent degradation of the environment by all practical means, including the following;
- Regulating the discharge of pollution to the air, water and land;
- Regulating the transport, collection, treatment, storage and disposal of wastes;
- Promoting recycling, re-use and recovery of materials in an economically viable manner; and
- To comply with and give effect to regional and international conventions and obligations relating to the environment.

The Act is divided into four sections. Part I provide the Act with considerable power and states that in the event of conflict between the Act and other legislation, the Environment Act shall prevail. Part II establishes and defines the powers and role of the ECD. Part III establishes the requirements for

environmental assessment, review and monitoring. This provides for an environmental assessment to consist of either a public environment report or if the development is shown to be of such a nature as to cause more serious impacts then the developer is required to prepare and submit an environmental impact statement EIS. Part IV details requirements for pollution control and emissions (noise, odour and electromagnetic radiation) and requirements to permits for the discharge of waste. Noise (restrictions on emitting unreasonable noise) is covered in Article 51(1).

Part III Article 17 requires any developer who proposes to carry out any prescribed development to make an application to the Director of ECD. Article 19 specifies that a developer shall not commence or continue to carry out any prescribed development unless the developer has been issued with a development consent (defined in the Act as a consent to carry out any development under Part III). Activities that require assessment are described as ‘prescribed developments’ and are included in the Second Schedule of the Act. There are two levels of environmental assessment; public environment report (PER), as described in Article 20, or if the development is shown to be such a nature as to cause more serious impacts then the proponent is required to prepare and submit an Environmental Impact Statement (EIS), as described in Article 23.

3.1.1.2 Environment Regulations (2008)

The Environment Regulations 2008 (the Regulations) establish the procedures for undertaking the environmental assessment of any projects categorized as a prescribed development.

The developer is required to first submit a “development application” which is reviewed by the ECD to determine the likely significance of impact and required level of environmental assessment. The decision resulting from the review may include that:

- No further assessment is required, as such the development application is accepted, and development consent is issued;
- A PER is required; or
- Where major projects are considered such as logging, large agricultural developments, mining and large-scale tourism developments and infrastructure projects, an EIS is required which includes technical, economic, environmental and social investigations.

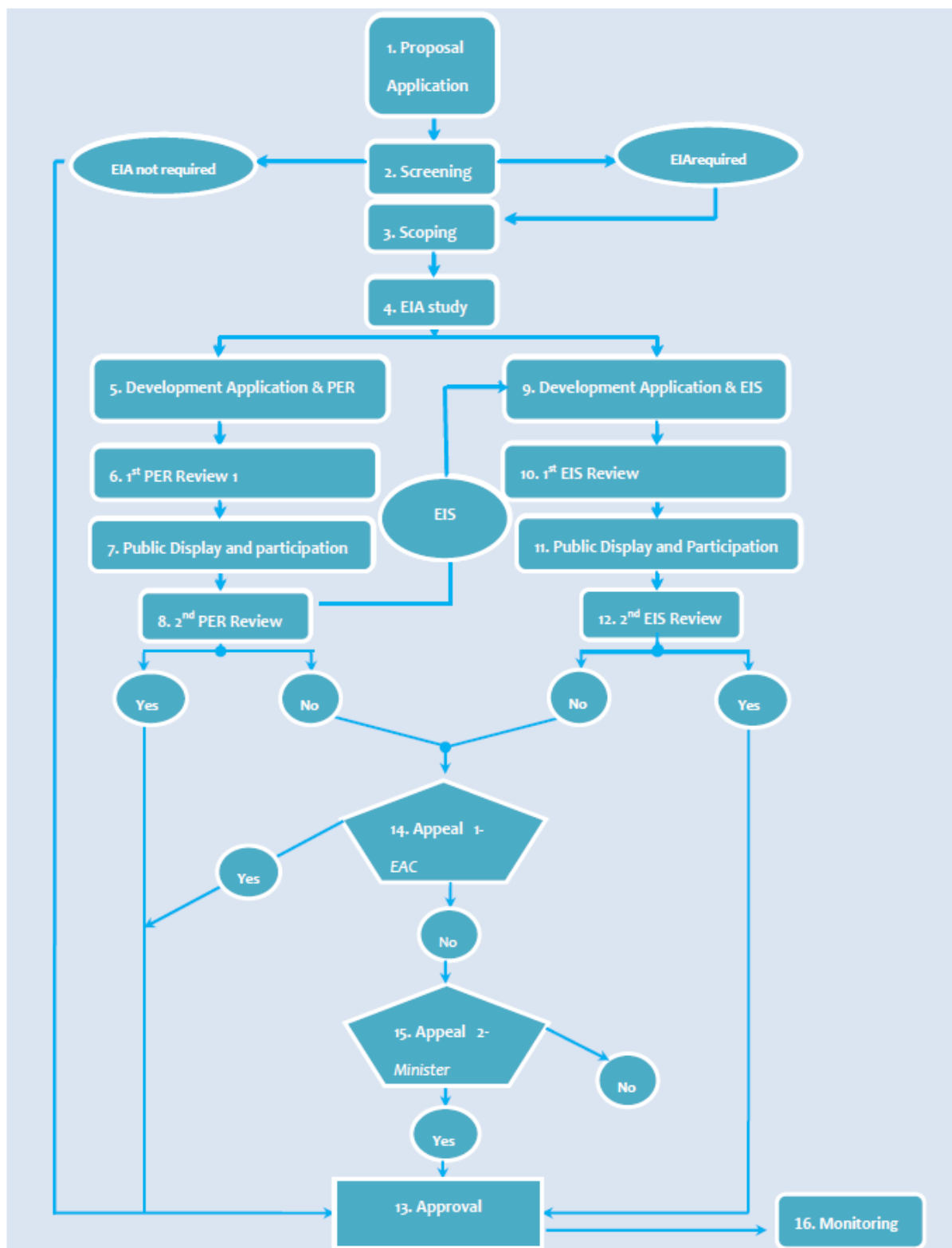
The Regulations establishes the procedures for undertaking the environmental assessment of ‘prescribed developments’ and the process of issuing development consent. The Regulations detail the process prescribed in the Act and set out the contents of PER and EIS.

Both the PER and EIS require public consultation. Following review and approval by the ECD, the development consent is issued either with or without conditions.

3.1.1.3 Environmental Impact Assessment Guidelines (2010)

The ECD developed the Environmental Impact Assessment Guidelines (2010) to provide basic advice and guidance to government officers, planners, developers, resource owners and those involved in processing development proposals, on the EIA process. The guidelines aim to clearly explain the procedures of EIA outlined in the Act and the Regulations. The guidelines describe the procedures needed to be undertaken (Figure 1), forms, and fees required before obtaining the development consent approval.

Figure 1 - EIA procedural steps¹



¹ ECD, 2010. EIA Guidelines 2010

3.1.1.4 *Relevance to Project Activities*

The ‘prescribed developments’ that may apply to Project activities are: Activity 9 - Public Works Sector (b) infrastructure developments; and (h) waste management, drainage and disposal systems. The minor renovations and refurbishments will likely not meet the definition of ‘infrastructure development’, however, the demolition and reconstruction of small hospitals and health centres may be considered prescribed developments. MHMS will consult with the ECD to confirm this. The incinerators will likely meet the definition of a ‘waste management system’ under the Act. The MHMS will follow the ECD environmental approval process and consult with ECD to determine what level of environmental impact assessment (PER or EIS) will be needed for the incinerators.

3.1.1.5 *Capacity of ECD*

The ECD have overall accountability for environmental management in Solomon Islands. MHMS will consult with the ECD regarding installation of the incinerators, which constitute the only project activity subject to the EIA process. The ECD have some existing World Bank safeguard experience and capacity gained from working on previous World Bank funded projects. However, ECD advise in their EIA Guidelines 2010 that the environment approval process can take several months (2-3 months at the minimum). Therefore, it is advisable that a proposal application to the ECD be lodged as early as possible to avoid delays. ECD also advise that prior to submission of the proposal application by the developer, it is advisable that the Developer should first seek written advice from the ECD².

3.1.1.6 *Other Relevant Policies, Plans and Regulations*

- **Solomon Islands National Implementation Plan for Stockholm Convention on Persistent Organic Pollutants.** Submitted in fulfilment of Solomon Islands obligations as a party to the Stockholm POPs Convention.
- **National Waste Management and Pollution Control Strategy 2017-2026.** The Solomon Islands National Waste Management and Pollution Control Strategy 2017-2026 is the country's roadmap for managing waste and controlling pollution in the natural environment for 10 years with the vision for ‘clean, healthy and green happy isles’. The strategy addresses 5 main waste streams: Solid Waste, Liquid Waste, Hazardous and Chemical Waste, Healthcare Waste and Electronic Waste. The Strategy serves as a blueprint for waste management and pollution control that captures the national priorities and targets and identifies the relevant strategies to realize the priority targets in the next decade. It represents a major step forward for integration of waste issues and concerns into broader sustainable development policy. Objectives include to promote waste minimization in all aspects of development and to improve and upgrade existing management and disposal systems.
- **Provincial Government Act 1997.** This Act gives power to the provinces to make their own legislation and pass ordinances including for protection and conservation of environment, culture, wildlife and coastal and lagoon shipping.
- **Town and Country Planning Act 1979.** This Act applies to all urban areas (Honiara and provincial towns) and includes the management of land (all types of ownership) and management and planning functions for urban and rural areas including development.

² ECD, 2010. EIA Guidelines 2010

3.1.2 Health-care Regulatory and Policy Framework

The Health Services Act (1996) sets up the Ministry of Health and Medical Services (MHMS) who are responsible for the provision of health and medical services in the Solomon Islands. The MHMS provides overall stewardship of the health sector and plays a regulatory role through strategic planning, standard setting and guidelines, for both government and non-state providers. The MHMS is responsible for providing public health services, including maternal and child health, family planning, school-based outreach, dental services, mental health, and vaccination and immunization. Section 10 (2) of the Health Services Act enables the Ministry to arrange with Provincial Assemblies and the Honiara City Council (HCC) to undertake any of the above-mentioned public health services. Section 13 of the Act also empowers the Ministry to make arrangements with church or voluntary bodies for the provision of health services³.

The Environmental Health Act 1980 sets up the administration and structure of community health in Solomon Islands. The Minister of Health is responsible for the administration of environmental health services. The Minister may delegate this administration to the Provincial Government and the HCC which are designated as Enforcement Authorities. The Environmental Health (Public Health Act) Regulations deal with public health issues and how to deal with them when they occur. The regulations empower the Minister and the Under Secretary of the MHMS to take specific measures to prevent the occurrence of a public health disease or where such disease had already occurred, to take measures to contain and prevent the spread of the disease⁴.

To ensure quality of care, key legislative instruments implemented and upheld by the MHMS include:

- **Health Workers Act 1989** – which regulates the functions and duties of various categories of health-workers and establishes a Health Workers Board “to prescribe registration, deal with matters pertaining to discipline and other connected matters”;
- **Medical and Dental Practitioners Act 1988** – “to regulate medical and dental practitioners”;
- **Nursing Council Act 1987** – which establishes a Nursing Council to register and regulate nurses, midwives and auxiliary nurses; and
- **Quarantine Act 1978** – “for the inspection, exclusion, detention, observation, segregation, isolation, protection, treatment, sanitary regulation and disinfection of vessels, persons, goods and things” in order to prevent the introduction or spread of diseases.

Other relevant plans and policies include:

- **National Health Strategic Plan 2016-2020.** The MHMS developed a five-year National Health Strategic Plan 2016-2020. The plan intends to target four key areas; improve service coverage, build strong partnerships, improve service quality and lay the foundation for the future. National Health outcomes and indicators are developed to ensure all operational plans of the ministry is directed and guided towards achieving this targets and other international objectives⁵.

³ WHO, 2015. Solomon Islands Health System Review. Vol. 5. No. 1.

⁴ International Waters Programme, 2003. National Assessment of Environment, Natural Resources and Relevant Related Legislation and Regulation in Solomon Islands

⁵ MHMS, 2017. Annual Report 2017

3.1.3 Infection Prevention Control and Health Care Waste Management

Infection Prevention and Control Guidelines (IPCG) for Health Facilities were commissioned in 2020 by the World Health Organization (WHO) in collaboration with the MHMS (Annex VI) and published in September 2021. The overall purpose of these guidelines is to provide guidance on IPC standards and healthcare waste management for all levels of health service provision within the Solomon Islands. These guidelines are based upon the WHO Core Components of Infection Prevention and Control, Sierra Leone National IPC Guidelines, the previous MHMS Solomon Islands IPC Guidelines, and the Secretariat of the Pacific Community (SPC) Infection Prevention and Control Guidelines.

The MHMS is responsible for the regulation of healthcare waste in the Solomon Islands. However, generally the management of healthcare waste lies with the individual hospitals with little intervention from the MHMS. MECDM is responsible for waste disposal and waste disposal facilities⁶. The waste management sector relies largely on legislative and regulatory documents that contain general waste provisions. The legislations summarized in Table 3 should be used as the guidance for proper management of healthcare wastes in the Solomon Islands. The MHMS IPCG also contains measures for managing health-care wastes (Annex VI).

Table 3 – Legislation and Regulations Impacting Healthcare Waste Governance - Solomon Islands⁷

Legislation	Type	Summary	Regulator/ Agency
Environment Act 2008	Act	The Act makes provisions for the protection and conservation of the environment. With regards to waste control and management, section 3c of the Act specifies the following: 'to reduce risks to human health and prevent the degradation of the environment by all practical means. In section 3(c)(ii), objects of the Act include to regulate the transport, collection, treatment, storage and disposal of wastes and to comply with and give effect to regional and international conventions and obligations relating to the environment. Waste is dealt with in Part IV Control of Pollution. Section 5 establishes an ECD consisting of a Director and Environmental Inspectors who enforce provisions of the Act.	MECDM/ECD
Environmental Regulations 2008	Regs	Part 5 details the considerations the Director must take in approving a licence application for waste discharge. Regulation 14(1)(d) states the Development may issue a Development Consent if satisfied that 'the proposed prescribed development will not contravene any relevant environmental obligation under any international treaty, convention or instrument to which Solomon Islands is a party'. Under r 18(1)(c), an appeal may be made against a decision of the Director under s 32 of the Act on the grounds the decision was 'inconsistent with any international treaty, convention or regional arrangement to which Solomon Islands is a party to'. Regulation 23(1)(c) states the Director	MECDM/ECD

⁶ SPREP, 2014. Baseline Study for the Pacific Hazardous Waste Management Project - Healthcare Waste

⁷ SPREP, 2014. Baseline Study for the Pacific Hazardous Waste Management Project - Healthcare Waste and SPREP, 2020. Stocktake of Existing and Pipeline Waste Legislation: Solomon Islands

		may issue a license in Form 8 (a license to discharge waste) if 'the amendment will not contravene any environmental obligation under any international treaty, convention or arrangement to which Solomon Islands is a party'.	
Environmental Health Act 1980	Act	This Act's objective is to ensure the maintaining of environmental health. Its regulation prohibits people from causing nuisances including the prohibiting of discharging of noxious matter or waste from premises. Section 94 prohibits depositing waste in water sources of urban sanitary districts. Sch 5 part I section 4 assigns refuse collection and street cleaning and refuse disposal to HCC.	MHMS
The Honiara (Refuse Disposal) Bylaw 1995	Bylaw	The By-Law provides for the use of standard receptacles as approved by the council and the means of disposal. The receptacles must be in good condition and taken care of. Fines are also incurred for offenders to the By-law.	Honiara City Council

3.1.4 Labour Legislation

Labour legislation relevant to the Project is summarized in the Labour Management Procedure (LMP) (Annex VII).

3.2 World Bank Environmental and Social Standards

3.2.1 ESF Standards Relevant to the Project

The Environmental and Social risk is classified as 'Substantial' for the Project. Six of the ten Environmental and Social Standards (ESSs) of the World Bank's (WB's) ESF have been screened as relevant. They are assessed in Table 4 below. The other four are considered not relevant, namely: ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS8 on Cultural Heritage, and ESS9 on Financial Intermediaries. Detailed information on the Bank's ESF are available at:

<https://www.worldbank.org/en/projects-operations/environmental-and-social-framework>.

The ESS that apply to the Project and the required measures and actions that apply, as contained in the Environmental and Social Commitment Plan (ESCP), are listed in **Table 4**.

Table 4 - Required Project Environmental and Social Standard Actions

Environmental & Social Standard	Required Measures and Actions
ESS1 Assessment and Management of Environmental and Social Risks and Impacts	<p>The MHMS shall recruit a full-time local Environmental, Social and Health and Safety and Community Engagement (ESHS&CE) Specialist. This position will be recruited/appointed within 6 months after the effective date of the Financing Agreement for the Project (Effective Date). An additional part time international Environmental, Social and Health and Safety (ESHS) Specialist and a GBV specialist shall be recruited/appointed upon Project approval and retained on an as-required basis.</p> <p>The interim PMU shall supply the services of its Safeguards Officer for a period of up to 6 months or until the ESHS&CE specialist has been recruited.</p> <p>The MHMS shall develop an Environmental and Social Management Framework</p>

	(ESMF). The ESMF will be prepared, disclosed and adopted no later than 30 days after the Effective Date and prior to commencement of relevant Project activities.
ESS2 Labor and Working Conditions	The MHMS will adopt Labour management procedures (LMP). The LMP will be prepared, disclosed and adopted as part of the ESMF, no later than 30 days after the Effective Date and before the carrying out of the relevant Project activities.
ESS3 Resource Efficiency and Pollution Prevention and Management	The MHMS will follow the MHMS IPCG, which contains healthcare waste management procedures. The MHMS IPCG will be reviewed and included in the ESMF, no later than 30 days after the Effective Date.
ESS4 Community Health and Safety	Precaution measures in line with the ESMF, MHMS IPCG and WHO guidelines on COVID-19 shall be put in place to prevent or minimize the spread of the infectious disease/COVID-19 from quarantine and isolation centres to the community. The project will promote the avoidance of sexual exploitation and abuse/ sexual harassment (SEA/SH) by implementing the WHO Code of Ethics and Professional Conduct for all workers, as well as the provision of gender-sensitive infrastructure such as segregated toilets.
ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Indigenous Peoples are expected to be the sole or the overwhelming majority of direct project beneficiaries. Accordingly, a separate Indigenous Peoples Planning Framework (IPPF) will not be prepared. The elements of an IPPF have been included in the overall project design and the SEP. The SEP requires that IPs are consulted about the project in a culturally-appropriated manner to identify and address any economic or social constraints that may limit opportunities to benefit from, or participate in, the project. The SEP will be updated, disclosed and adopted no later than 30 days after the Effective Date.
ESS8 Cultural Heritage	Although this standard is not considered relevant, in the unlikely event of construction or the movement of earth in connection with any project activities that have not yet been identified a chance finds procedure (CFP) will be prepared and integrated into the ESMF for the project. The CFP will be prepared, disclosed and adopted as part of the ESMF no later than 30 days after the Effective Date.
ESS10 Stakeholder Engagement and Information Disclosure	The SEP will be updated, disclosed and adopted by MHMS no later than 30 days after the Effective Date. The MHMS shall adopt, implement and update the Grievance Mechanism (GM). The GM will be adopted within 30 days of the Effective Date and thereafter implemented and updated throughout project implementation

3.2.2 World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines) relevant to the project

The following EHS guidelines are relevant to the project and have been used to guide the development of the CoESP and LMP:

- General EHS Guidelines: Environmental
- General EHS Guidelines: Occupational Health and Safety
- General EHS Guidelines: Community Health and Safety

- General EHS Guidelines: Construction and Decommissioning
- Environmental, Health, And Safety Guidelines Health Care Facilities.

3.2.3 World Bank Response to COVID-19

The World Bank Group (WBG) has developed the following guidance material in response to COVID-19 outbreak:

- Guideline for the preparation of a Contingency Plan for Project Sites.
- Technical Note: Public Consultations and Stakeholder Engagement to be applied to projects under implementation and those under preparation.
- Technical Note: Use of Military Forces to Assist in COVID-19 Operations Suggestions on how to Mitigate Risks.
- Technical Note: SEA/H for HNP COVID-19 Response Operations.

For ESS1, the WBG also identifies risks and mitigations measures for the transactions involving specific project finance activities (i.e. works, goods and services, and technical assistance). The guidance has been considered during the preparation of this ESMF and supporting documents.

3.3 Relevant International and Regional Agreements

Solomon Islands is a party to the following regional and international agreements:

- **London Convention and Protocol.** The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972, commonly called the "London Convention", is an agreement to control pollution of the sea by dumping. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter. In 1996, the "London Protocol" was agreed to further modernize the Convention and, eventually, replace it. Under the Protocol all dumping is prohibited, except for possibly acceptable wastes on the so-called "reverse list". The Protocol entered into force on 24 March 2006 and there are currently 53 Parties to the Protocol, including the Solomon Islands.
- **Natural Resources & Environment of South Pacific Region (1986) (SPREP or Noumea Convention).** This Convention is the major multilateral umbrella agreement in the Pacific Region for the protection of natural resources and the environment. This Convention was ratified by the Solomon Islands in 1989.
- **Pacific Regional Solid Waste Management Strategy 2010-2015.** Solomon Islands was one of several Pacific island countries to adopt the Pacific Regional Solid Waste Management Strategy, initiated by SPREP, and adopted by member countries in 2009. This regional strategy covers medical wastes from public institutions such as hospitals and health care clinics, and special and difficult wastes such as asbestos.
- **Stockholm Convention for Persistent Organic Pollutants.** The Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). This convention was ratified and entered into force in Solomon Islands in May 2004.
- **Waigani Convention on Hazardous Waste.** The 1995 Waigani Convention is a treaty that bans the exporting of hazardous or radioactive waste to Pacific Islands Forum countries and prohibits

Forum island countries from importing such waste. The convention has been ratified by Solomon Islands and entered into force in 2001.

3.4 Relevant Good International Industry Practice (GIIP)

Relevant Good International Industry Practice (GIIP) such as WHO technical guidance have been developed for addressing COVID-19. These technical guidance documents are evolving, and they are being updated as new information becomes available. The guidance has been considered during the preparation of this ESMF and supporting documents.

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 centres](#), (viii) [Surveillance and case definitions](#), (ix) [Risk communication and community engagement](#), (x) [vaccine readiness assessment](#), (xi) [surveillance of adverse events following immunization](#).

WHO Guidelines for COVID-19 are summarized in Table 5. Additional guidance is also listed in Annex VIII.

Table 5 – WHO Guidelines for COVID-19

WHO Guideline	Content
Covid-19 guidance environmental on cleaning for healthcare facilities 17 April 2020	Guidance on the cleaning and disinfection of rooms and wards or areas in healthcare facilities occupied with suspected and confirmed COVID-19 patients.
Covid19-stigma-guide	Methods to address risk of social stigma and discriminatory behaviours against people of certain ethnic backgrounds as well as anyone perceived to have been in contact with the virus.
Critical preparedness readiness and response actions COVID-10 2020-03-22_FINAL-eng	Update to the interim guidance document. This version provides updated links to WHO guidance materials and provides the full list of WHO technical guidance available for COVID-19 and provides updated recommendations in the table.
WHO-2019-nCoV-essential_health_services-2020.1-eng	Countries will need to make difficult decisions to balance the demands of responding directly to COVID-19, while simultaneously engaging in strategic planning and coordinated action to maintain essential health service delivery, mitigating the risk of system collapse. ... Establishing effective patient flow (including screening, triage, and targeted referral of COVID-19 and non-COVID-19 cases) is essential at all levels.
WHO-2019-nCoV-Hand_Hygiene_Stations-2020.1-eng	Hand hygiene is the most effective single measure to reduce the spread of infections through multimodal strategies.
WHO-2019-nCoV-HCF_operations-2020.1 – eng	To guide the care of COVID-19 patients as the response capacity of health systems is challenged; to ensure that COVID-19 patients can access life-saving treatment, without compromising public health objectives and safety of health workers.

WHO-2019-nCov-HCW_risk_assessment-2020.2-eng	This data collection form and risk assessment tool can be used to identify infection prevention and control breaches and define policies that will mitigate health care worker's exposure and nosocomial infection (infection originating in a hospital).
WHO-2019-nCov-HCWadvice-2020.2-eng	This document highlights the rights and responsibilities of health workers, including the specific measures needed to protect occupational safety and health.
WHO-2019-nCov-IPC_Masks-2020.3-eng	It is possible that people infected with COVID-19 could transmit the virus before symptoms develop. It is important to recognize that pre-symptomatic transmission still requires the virus to be spread via infectious droplets or through touching contaminated surfaces.
WHO-2019-nCoV-IPC_WASH-2020.2-eng	Frequent and proper hand hygiene is one of the most important measures that can be used to prevent infection with the COVID- 19 virus. WASH practitioners should work to enable more frequent and regular hand hygiene by improving facilities and using proven behaviour-change techniques.
WHO-2019-nCoV-IPC-2020.3-eng	Guidance on infection prevention and control (IPC) strategies for use when COVID-19 is suspected.
WHO-2019-nCoV-IPCPE_use-2020.2-eng	Summarizes WHO's recommendations for the rational use of personal protective equipment (PPE) in health care and community settings, as well as during the handling of cargo.
WHO-2019-nCoV-Leveraging_GISRS-2020.1-eng	Several countries have demonstrated that COVID-19 transmission from one person to another can be slowed or stopped. The key actions to stop transmission include active case finding, care and isolation, contact tracing, and quarantine.
WHO-COVID-19-lab_testing-2020.1-eng	Laboratory testing guidance for COVID-19 in suspected human cases.
WHO-COVID-19-IPC_DBMgmt-2020.1-eng	Interim guidance for all those, including managers of health care facilities and mortuaries, religious and public health authorities, and families, who tend to the bodies of persons who have died of suspected or confirmed COVID-19.
WHO-WPE-GIH-2020.2-eng	The purpose of this document is to provide interim guidance on laboratory biosafety related to the testing of clinical specimens of patients that meet the case definition of the novel pathogen identified in Wuhan, China, that is, coronavirus disease 2019 COVID-19.
WHO 2019 Overview of the Technologies for the Treatment of Infectious and Sharp Waste from Health Care Facilities?	The purpose of this document is to provide 1) criteria for selecting technologies to facilitate decision making for improved health care waste management in health care facilities and 2) an overview of specific health care waste technologies for the treatment of solid infectious and sharp waste for health care facility administrators and planners, WASH and infection prevention control staff, national planners, donors and partners.
WHO-2019-nCov-Immunization-Cold_Chain-2020.1-eng.pdf	The purpose of this document is to provide advice on cold-chain safety considerations.

4 Environmental and Social Baselines

4.1 Socio-Economic Baseline

4.1.1 Population

Solomon Islands has around 19.8% (or 102,030) of its estimated present total population of 515,870 living in urban and peri-urban areas. The country is divided into nine provinces namely Central, Choiseul, Guadalcanal, Isabel, Makiri-Ulawa, Malaita, Rennell and Bellona, Temotu, Western and the capital, Honiara City which is situated on the north-western coast of Guadalcanal. Malaita has the largest population size of 137,596 people, followed by Guadalcanal (93,614), Western (76,649) and Honiara city (62,609) based on the 2009 census.

Data from the 2009 Census of Population and Housing suggests that Solomon Islands' annual population growth rate of 2.3% is still relatively high compared with other countries in the region. The population growth rate is the highest in Guadalcanal (4.4%) followed by Choiseul (2.8%), Honiara (2.7%), Makira-Ulawa (2.6%) Western (2%). A contributing factor to Solomon Islands' high natural growth rate is the high fertility rate. Although the average number of children per woman dropped marginally from 5 in 1999 to 4.7 in 2009, Solomon Islands still has a relatively high fertility rate. In addition, the infant mortality rate (IMR) declined by 6 deaths per 1,000 births, and life expectancy at birth improved during the period 1999–2009. Life expectancy for Solomon Islands women in 2009 was 73.1 years, compared with 66.2 years for men.

International migration has declined since the mid-1990s. However, internal migration is significant, with Honiara and Guadalcanal Province being target destinations because of employment opportunities and developments in Honiara.

4.1.2 Human Development Index

Solomon Islands' HDI value for 2019 is 0.567, which is below the average of 0.631 for countries in the medium human development group and positions it at 151 out of 189 countries and territories. The Solomon Islands' HDI of 0.567 is below the average of 0.747 for countries in East Asia and the Pacific, but is comparable to Kiribati and Vanuatu, which have HDIs ranked 134 and 140, respectively.⁸

Between 2000 and 2019, Solomon Islands' HDI value increased from 0.475 to 0.567, an increase of 19.4%. Between 1990 and 2019, Solomon Islands' life expectancy at birth increased by 8.6 years, mean years of schooling increased by 1.2 years and expected years of schooling increased by 4.2 years. Solomon Islands' GNI per capita increased by about 15.2% during this period.

Table 6 –Solomon Islands' Human Development Index Trends

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2017 PPP\$)	HDI value
1990	64.4	6.0		1,956	
1995	65.6	7.2		2,356	
2000	67.4	6.6	4.6	1,811	0.475

⁸ UNDP, Human Development Report 2020. The Next Frontier: Human Development and the Anthropocene

2005	69.2	8.4	4.8	1,854	0.509
2010	70.7	10.7	5.1	1,671	0.537
2015	72.2	10.3	5.4	2,298	0.563
2016	72.4	10.2	5.4	2,240	0.561
2017	72.6	10.2	5.5	2,225	0.562
2018	72.8	10.2	5.5	2,251	0.564
2019	73.0	10.2	5.7	2,253	0.567

4.1.3 Indigenous People and Culture

The majority of Solomon Islanders are ‘indigenous people’ with traditional tenure, knowledge and governance structure which are still prevalent in their livelihood. Almost 87 per cent of the land in the Solomon Islands remains under some form of customary tenure and group or individual right of access to land through customary processes. Customary law and practices are rights recognised in the laws and the Solomon Islands Constitution and remain one of the main components of ethnic and national identity. Ninety-five per cent of the population is indigenous Melanesian, with smaller Chinese, European, Micronesian (1.2%) and Polynesian groups (3.1%) also resident. However, there is significant diversity within the Melanesian population, which comprises approximately 95 language groups with strong affiliation to cultural groupings. Governance and politics is also usually based on cultural traits such as patronage and the ‘big man’ patrimonial system which is deeply rooted in tradition and culture. This cultural orientation plays an important role in how communities respond to socioeconomic development and the management of their environment and natural resources⁹.

4.1.4 Vulnerability

In common with other small island states, the Solomon Islands economy is structurally vulnerable due to:

- The Solomon Islands’ small population, which is an indicator of the country’s limited ability to achieve structural economic transformation.
- The economic remoteness of the archipelago.
- The share of the total population consisting of people who live in low-lying coastal areas is higher than the average for other lesser developed countries, including neighbouring Pacific Islands states.
- The level of merchandise export concentration in the Solomon Islands.

While these factors indicate a significant degree of economic vulnerability, it should be noted that the share of the primary sector in the Solomon Islands economy is not been greater than the average among lesser developed countries; instability of agricultural production has been lower; and the export of goods and services has been less unstable than in the Solomon Islands than in comparable economies. Although the Solomon Islands can be classified as vulnerable due to its geographical location and

⁹ MECDM, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

economic concentration, it has not in practice been significantly destabilized by shocks beyond domestic control.¹⁰

Within the population, vulnerability may stem from a person's origin, gender, age, health condition, economic deficiency and financial insecurity, disadvantaged status in the community (e.g. minorities or fringe groups), dependence on other individuals or natural resources, etc. Aggregate poverty has declined since the period of civil conflict between 1998 and 2003 known as the Tensions. The poverty rate, based on the national poverty line, reduced from 22% in 2005/06 to 14% in 2012/13, implying that some 45,000 people were lifted out of poverty over that period. However, a high proportion of Solomon Islanders remain vulnerable to falling into poverty. Despite improvement in poverty rates, the wellbeing of Solomon Islanders remains highly vulnerable to frequent shocks. Poverty remains extensive in the country, with 12.7% of the people still living below the national basic needs poverty line. The geographical distribution of poverty in the Solomon Islands is uneven and is significantly higher in the Makira and Guadalcanal provinces. Moreover, poverty in the Solomon Islands is largely a rural phenomenon: 87% of Solomon Islanders below the food poverty line live in rural areas. Poverty also depends on education attainment and economic activity: the number of poor households declines when the education level of the household's head is higher, and poverty rates are significantly lower among wage workers than across other types of workers.

4.1.5 Economy

Solomon Islands' per-capita gross domestic product of USD\$600 ranks it as a lesser developed nation, and more than 75% of its labor force is engaged in subsistence and fishing. The economy has been described for some time as a dual economy due to the earnings emerging from natural resource extraction, which has allowed the development of a two-tiered economy. The first is the traditional and informal economy centred on subsistence agriculture, fishing and collection of forest products. This economy remains only partially cash based and is central to the lives of the majority of the population in rural areas. It is estimated that this economy could represent as much as 60% of the formal economy. Its continuation is closely linked with access to land and resources. It is constrained by limited provision of state services and poor access to markets. The second tier is a fully cash-based economy driven primarily by revenue from the extraction of resources, but supporting an emerging service industry. Services account for about 57.4% of GDP (approximately half being Government services), agriculture 33.4% (not including subsistence) and industry 9.3%. Despite strong growth within this economy, it remains unable to provide sufficient employment to meet an ever-increasing demand linked to both an increasing population and an increasing demand for consumer goods. It is estimated that in rural areas, on average, less than 10% of rural population has access to formal employment, while in Honiara, unemployment within 15 to 24 year olds is estimated at 80%. The growing dependency of the rural community on the cash economy has significant implications for the growth of urban centres, with the capital Honiara experiencing an influx of migrants from all provinces¹¹.

COVID-19 has triggered a severe regional and global economic downturn. It has affected the East Asia and Pacific regional economy through both domestic and external channels. The necessary but economically costly lockdowns have led to a sharp contraction of economic activity and an abrupt

¹⁰ United Nations Committee for Development Policy 20th Plenary Session, 2018. Vulnerability Profile of Solomon Islands

¹¹ MECMD, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

tightening of global financing conditions. Regional commodity exporters – including those in the Solomon Islands – have experienced a sharp decline in commodity prices.¹² Growth in the region, excluding China, is projected to contract by 1.2% in 2020 and to rebound in 2021 as the effects of the virus dissipate. Growth forecast downgrades are sizable both in the region's major economies and in the Pacific Islands' smaller export and tourism driven economies which have limited policy space to mitigate the impact of the outbreak and, in addition, are recovering from the devastating impact of cyclone Harold in April 2020. The downgrades reflect high exposure of these countries to the rest of the world through tourism, remittances and, particularly relevant to the Solomon Islands, commodity exports. The World Bank forecasts a 6.7% fall in Solomon Islands' projected Gross National Product in 2020 and a 0.3% fall in 2021.

4.1.6 Health and Health-care Services

The MHMS is the key health provider in the Solomon Islands through a network of over 300 public facilities. Key constraints to access include poor maintenance of health facilities, high rates of facility closure, and inadequate referral systems. At 1.3 per 1,000, the hospital bed-to-population ratio is relatively low. There are approximately 22 doctors per 100,000 of population and 205 midwives and nurses per 100,000. Health services are concentrated in the urban centers with a hierarchy of facilities available ranging from nurse aide posts and rural clinics to National Referral Hospital. Of the nine provinces in the Solomon Islands, eight have a public hospital. However, there are disparities in access to health services due to a population spread over a difficult geographic terrain. Although the number of health workers per capita has improved in recent years, the skill mix and distribution of health workers across provinces, disease burden, and national programs is generally inequitable and supply driven.¹³

The large majority of health expenditure is publicly funded by the Solomon Islands Government, from both domestic and development partner funding. Total health expenditure (THE) per capita was US\$102 (SB\$753) in 2014, comparable to other countries with similar levels of income. In nominal terms, THE and per capita health expenditure increased between 2007 and 2014 but in real terms THE expenditure per capita fell by 8% during this period, reflecting high population growth. In 2014, public expenditure on health was 92% of THE, the highest share in the region. Solomon Islands almost tripled its nominal domestic allocation to MHMS between 2007 and 2016 and has consistently allocated MHMS the second largest recurrent budget after the education sector. MHMS's largest expenditure is on payroll and staff benefits, and the largest spending groups are provincial divisions, followed by the National Referral Hospital (NRH) and corporate services. In 2016, just over one-half of MHMS total recurrent expenditure was spent on payroll and staff benefits. Goods and services represented one-quarter of total recurrent expenditure, but this share is declining as the share of expenditure on grants to provincial divisions is increasing. Provincial divisions incurred 40 percent of total recurrent expenditure in 2016, followed by the NRH (just under 20%). This is in line with MHMS policy to move resources to the provincial divisions to deliver services for the majority of the population that still lives outside of the main urban center of Honiara.

Many population health outcomes have improved significantly in Solomon Islands in the last two decades, for example, a marked decline in the prevalence of malaria and tuberculosis and the improvement of overall immunization coverage. However, the country still faces significant challenges.

¹² World Bank, 2020. Global Economic Prospects

¹³ World Bank, 2018. Solomon Islands Health Financing System Assessment

In general, malaria and tuberculosis are the major public health concerns in Solomon Islands, along with sexually transmitted infections, acute respiratory tract infections, diarrhea, viral hepatitis, dengue fever, and measles. Recent outbreaks suggest immunization coverage is still insufficient. Poor sanitation continues to be a serious issue, and tuberculosis and chronic respiratory infections remain a significant share of the disease burden. Ongoing challenges with communicable diseases and maternal, neonatal, and nutritional health persist. The Solomon Islands is suffering the classic “double burden of communicable and non-communicable diseases” not dissimilar to most other countries in the region, requiring society to adapt rapidly to the challenge of coping with a heavy and growing caseload of communicable and non-communicable disease (NCDs) simultaneously. NCDs now account for 66% of the burden of disease, up from 4% of morbidity and mortality in 1990. In 2015, cardiovascular diseases were responsible for the largest share of the overall disease burden, causing 21% of all Disability Adjusted Life Years (DALYs) lost due to morbidity and premature mortality, followed by diabetes, urogenital, blood, and endocrine diseases (12%), and diarrhea, lower respiratory and other infectious diseases (8%). The top risk factors for death in 2015 were largely lifestyle related and closely linked to NCDs, with dietary risks, high body mass index and high fasting plasma glucose prominent risk factors. Tobacco smoking remains a high-risk factor, with smoking rates of 41.4% for men and 10.6% for women over the age of 15.

Both under- and overnutrition remain a concern, with 36% of children under five years of age stunted when compared to the World Health Organization growth standard. Across provinces, the highest stunting rates are reported in Makira, at 46% of children, a reflection of the fact that it has the highest poverty of any province. The stunting rate is slightly higher in urban areas, in poorer households. Stunting is a well-established risk marker and proxy indicator for a range of physical and environmental factors which impair child health and well-being. Undernutrition in the first 1,000 days is associated with poor cognitive and educational outcomes in childhood and adolescence, as well as lower wage earnings and decreased likelihood of exiting poverty in adulthood.

4.1.7 Education

As per the 2009 census data the highest level of education completed, 15 % of males and 9% of females 12 years and older responded that they attended secondary education; 59% and 51% of males and females completed only primary level, and 19% of males and 35% females had no schooling completed. 3% of males and 1% of females had tertiary education. The average literacy rate for people aged 15 years and older is relatively low at around 76%; this is likely due to a range of factors including lack of compulsory education, poor access to services in some areas, low enrolment and completion rates and the prevalence of extreme poverty. Honiara, as the center of education in country, has schools that include the Solomon Islands National University, University of the South Pacific (USP), and Woodford International School. Solomon Islands National University was initiated in 2012 from the Solomon Islands College of Higher Education which was basically pooled from all the existing government schools in 1984. The USP Solomon Islands Campus at Honiara provides tertiary education to students of the South Pacific. The Woodford International School offers the International Baccalaureate Primary Program from early childhood to Year 5 and then the Cambridge International Middle Years and High School Program up to the Cambridge Advanced Level Program in Year 12.

4.1.8 Gender Based Violence

Solomon Islands has high background rates of Gender-based Violence (GBV). The causes of GBV are multiple, but it primarily stems from gender inequality and its manifestations. In Solomon Islands, GBV has been largely normalized: 73% of men and 73% of women believe violence against women is justifiable, especially for infidelity and “disobedience,” as when women do “not live up to the gender roles that society imposes.”¹⁴ The Solomon Islands Family Health and Safety Study (2009) reveals that 64% of women between the ages 15 to 49 years of age reported experiencing physical or sexual violence or both by an intimate partner. Regional evidence suggests that this was further exacerbated by COVID-19 lockdowns¹⁵. 94% of women in the Solomon Islands said their mental health has been affected since the spread of COVID-19, as compared to 37% of men¹⁶. One of the recommendations arising out of the Family Health and Safety Study was to build health workers’ capacity to be able to respond effectively to victims of violence through a training program that incorporated good practices from international guidelines and was sensitive to the cultural and social context. Following that study, in the period 2015 to 2017, the MHMS through the Gender-based violence Program Coordinator delivered training sessions in five provinces on GBV to about 20% of Solomon Islands’ health workers.

In 2017, a government multi-ministry collaboration led by the Ministry of Women Children and Health Affairs, and funded by the World Bank, developed the SAFENET Assessment & National Action Plan 2014-2016. The intention was that the implementation of such a plan would bring about real and tangible change to the benefit of victims and survivors of GBV in the Solomon Islands. In 2010 SIG passed the National Policy on Eliminating Violence Against Women (EVAW Policy) to further help control the problems of VAW. Yet, the prevalence of GBV is still widespread with little change in norms justifying wife beating between 2009 (the Family Health and Safety Study) and 2015 (Demographic and Health Survey). The persistence of GBV in the Solomon Islands undermines the potential of many women to participate equally in the economic and social development of the country.

Limited services to support GBV victims exist outside the capital Honiara, which leaves many vulnerable women and men living in the remaining provinces without essential service or care such as clinics, counseling, and security. Partial or complete lockdowns have disrupted women’s already limited access to services: traditional service providers such as women’s organizations and civil society organizations are often the first to close, due to funding being diverted elsewhere or because they are not classified as “essential” services¹⁷.

The health care system, which is often a first point of contact for survivors of violence, thus becomes even an even more critical part of the GBV referral system during the pandemic, with the capacity to provide up-to-date information on available service providers, including non-traditional providers such as hotlines. With only 20% of frontline health care workers trained in GBV response and referral, there exists an untapped opportunity to strengthen the health care’s system GBV response during and after the pandemic through the training of frontline health care workers. Global evidence has found that

¹⁴ Rasanathan J. K. and Bhushan, A., 2011. Gender-based violence in Solomon Islands: Translating research into action on the social determinants of health. World Health Organization, Regional Office for the Western Pacific

¹⁵ UN Women, Jun 11. 2020. Across the Pacific Region, crisis centers respond to increased cases of violence against women amid COVID-19

¹⁶ UN Women, 2020. Unlocking the lockdown.

¹⁷ World Bank. Service Provision for GBV Survivors During COVID-19 Response: Essential Information for World Bank Teams in South Asia

incorporating even one module on GBV in training curricula for health care providers may enable healthcare providers to better recognize key signs and symptoms and more adequately treat and/or refer survivors¹⁸.

4.2 Environmental Baseline

4.2.1 Solid Waste Management

Solid waste represents the majority of the waste produced in many parts of Solomon Islands. The total solid waste generation rate (household and non-household) for Solomon Islands is estimated to be 0.75–1.0 kilogram (kg) per person per day. With a population of around 80,000 and a waste generation rate of 1.0 kg/ person/day, the greater Honiara urban area is estimated to generate 80 tons per day or 29,000 tons per year. It is estimated that 40%–50% of waste is organic. If the urban population continues growing at its current rate, solid waste generation is expected to double within 18 years¹⁹.

4.2.1.1 Waste Collection

The HCC Environmental Health Division is responsible for collecting household waste within Honiara City and transporting it to the Ranadi dump site. HCC is also responsible for collecting waste from the central market. HCC formerly contracted out all household waste collection to private companies, but a donation of three small, used compactor trucks induced HCC to take up most of the service again. HCC now uses the donated trucks to collect household waste on six of 10 routes—leaving the other four for tender by private contractors. HCC and three private contractors also collect commercial wastes in and around Honiara, and transport it to the Ranadi dump site. HCC uses the proceeds of its commercial collection service to subsidize the household collection service²⁰.

However, less than half of Honiara City’s population is provided with waste collection services. The large informal settlements, which fall outside of the HCC municipal boundary, also do not receive waste collection services. Since only a small proportion of solid waste is collected, much of the Honiara urban area’s waste is improperly disposed of through open burning and illegal dumping. This has serious public health and environmental consequences. For example, poor solid management practices were linked to a severe outbreak of dengue fever in Honiara in 2013²¹.

Poor collection systems are a broad ranging challenge covering urban centres, settlements and communities. This issue is directly related to the ability of responsible agencies to collect and dispose of waste. Honiara is a prime example of this challenge where the pressure on the collection system of HCC is further exacerbated by the lack of waste segregation by household and business premises. At the provincial level, the challenge is directly related to the absence of proper landfills and the limited capacity to source appropriate collection and disposal equipment²².

4.2.1.2 Waste Disposal

There are no sanitary landfills in the Solomon Islands. The largest dumpsite in the country is located in Honiara (Ranadi Landfill). It is used for domestic, commercial and industrial wastes collected by HCC as

¹⁸ USAID, 2009.

¹⁹ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²⁰ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²¹ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²² MECMD, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

well as individual industries and the general public²³. The HCC Environmental Health Division is responsible for managing the Ranadi dumpsite, which is located 6 kilometers from the city, on what was once a wetland, sited behind the sand berm that formed the nearby beach in a light industrial area²⁴.

The active part of the dumpsite covers about 1.5 hectares, but the total area is likely double that since beach erosion to the northwest reveals a thick layer of rubbish, and waste has also spread to adjacent properties. It is estimated that 20 to 30 tons of solid waste is disposed of daily at the landfill. Access to the site is unrestricted, and all wastes are accepted. Scavenging at the dumpsite provides a source of income for several dozens of nearby residents²⁵.

Until recently, Ranadi site was an unmanaged open dump. Uncontrolled burning was commonly used to reduce the volume of wastes at the site, with no leachate treatment or control. Records on the number of vehicles and quantity of wastes entering the dump site are not kept. In 2013, upgrading works on the dumpsite began with assistance provided by the Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management funded by the Japan International Cooperation Agency (JICA)²⁶. The project is implemented in partnership with the MECDM, MHMS and the HCC. As part of the assistance, new cells have been created where waste is now being compacted. Large bulky wastes, such as vehicle bodies and white goods, have been removed to create more space; and a simple drainage system to capture leachate and a small settling and digestion pond have been installed. An office is also being established to improve administrative management of the dumpsite²⁷.

All provincial centres face challenges with allocation of land and/or designation of the proper landfills²⁸. Most wastes are collected and transported to local (unsanitary) landfills where they are buried or burned. Waste minimization, and better recycling systems, will be essential in reducing the volume of wastes that enter the landfill.

4.2.2 Asbestos

Asbestos is a naturally occurring rock fibre that it is harmful to humans. When products containing asbestos are damaged, such as during demolition or refurbishment, small fibres are released and become airborne. Breathing in asbestos fibres can cause a range of diseases including cancer²⁹. A regional survey undertaken by the PacWaste project found a low-moderate relative risk of confirmed asbestos-containing materials (non-residential) in Solomon Islands. However, it is possible that some asbestos may be present in old buildings and structures to be refurbished and that asbestos may end up in demolition debris during renovation / refurbishment activities. All asbestos waste and products containing asbestos should be removed by specially trained workers and buried at an approved and licenced landfill. The waste must not be tampered with or broken down to ensure that no fibres become airborne. During the course of the PacWaste survey, new building materials containing asbestos were identified in retail outlets in the Solomon Islands³⁰. This means that the asbestos problem in Solomon

²³ MHMS, 2009. National Solid Waste Management Strategy 2009-2014

²⁴ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²⁵ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²⁶ MECDM, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

²⁷ ADB, 2014. Solid Waste Management in the Pacific - Solomon Islands Country Snapshot

²⁸ MECDM, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

²⁹ SPREP, EU & WHO, 2016. The State of Asbestos in the Pacific

³⁰ SPREP, EU & WHO, 2016. The State of Asbestos in the Pacific

Islands is not just a historical one as the number of houses with asbestos is likely to be growing. Annex II – CoESP contains management measures for the safe handling and disposal of asbestos wastes and prohibits the use of asbestos containing building materials in Project activities.

4.2.3 Health-care Waste Management

Healthcare waste is defined as the total waste stream from a hospital or health-care facility, which would include non-hazardous or general waste and hazardous healthcare waste. Hazardous healthcare waste has the potential to be infectious to humans, cause injury or pollute the environment. Correct treatment and disposal is therefore important to protect people and the environment³¹.

In the past, there was little to no management of health care wastes at the National Referral Hospital in Honiara. Wastes such as amputated body parts, sharps, and health care equipment were thrown at the back of the hospital compound near the seashore where they were buried or burnt. Health authorities have been initiating ways of improving the countries health care management. Provincial hospitals and clinics have experienced the same problems as at the National Referral Hospital. The use of incinerators might ease management of such special wastes in the provinces³².

PacWaste conducted a healthcare waste management baseline survey in July 2014, through which information was collected on current waste management processes. Audits were conducted at six hospitals: Honiara National Referral Hospital (Honiara); Gizo Hospital (Gizo); Helena Goldie Hospital (Munda); Kilu'ufi Hospital (Auki); Atoifi Adventist Hospital (Atoifi); and Kirakira Hospital (Kirakira)³³. The baseline study identified the following inadequacies: 1) Lack of documented waste management planning system; 2) sub-standard healthcare waste segregation and containment practices; 3) inadequate facilities for storage of healthcare waste before treatment; 4) treatment infrastructure incapable of definitively destroying the healthcare waste infection risk; 5) Inappropriateness and irregular use of PPE; and 6) no structured training programs for healthcare waste management stakeholders³⁴.

The survey identified the need for improved storage, treatment and disposal solutions for healthcare waste across Solomon Islands, noting that the method for treatment of healthcare waste was not up to standard at any of the hospitals visited. To address these needs, PacWaste procured five high temperature incinerators and provide much needed equipment, PPE and healthcare waste management training at all six of the locations surveyed³⁵. However, it is understood that none of the PacWaste Project funded incinerators operates properly and are currently not being used.

In 2008, the Ministry of Health developed a draft healthcare waste policy with the objective to ensure the management of healthcare waste, including waste equipment and waste storage areas, is achieved in a safe, hygienic and efficient manner. No progress has been made since the draft policy, with each

³¹ SPREP, 2014. Healthcare Waste in the Pacific Factsheet

³² MHMS, 2009. National Solid Waste Management Strategy 2009-2014

³³ SPREP, 2014. PacWaste Country Profile – Solomon Islands

³⁴ SPREP, 2014. Baseline Study for the Pacific Hazardous Waste Management Project Healthcare Waste – Solomon Islands.

³⁵ SPREP, 2014. PacWaste Country Profile – Solomon Islands

hospital and respective healthcare centres resorting to their own initiative to properly manage the healthcare wastes³⁶.

Information regarding the waste management process occurring, from ward-level waste generation, separation of wastes, through to ultimate treatment and disposal as assessed by SPREP in 2014, is described for six Solomon Islands hospitals in Table 7.

³⁶ MECDM, 2017. Solomon Islands National Waste Management and Pollution Control Strategy – 2017-2026

Table 7 – Waste Management Processes Observed at Six Solomon Island Hospitals³⁷

	Hospital Name	Honiara National Referral Hospital			Gizo Hospital (opened 2013)		Helena Goldie Hospital			Kilu'ufi (Auki) Hospital			Atoifi Hospital			Kirakira Hospital			
Generation & Segregation	Dedicated Containers/ Bags	Y			Y		N			N			N			Y			
	Colour Coding	Y			Y		Y			N			Y			N			
	Sharps segregated & secure	Y			Y		Y			Y			Y			Y			
	Signage Present	N			Y		N			N			N			Y			
Internal Handling	Degree of manual handling of bags	High			Medium		High			High			High			High/Limited			
	Internal Transport Mode	Wheelie Bin/Trolley			Wheelie Bin/Trolley		Manual			Manual/Wheelie Bin			Manual			Manual			
	Spill Kit Present	N			Y		N			N			N			N			
Storage	Dedicated & Appropriate Area	N			N		N			N			N			Y			
	Loading/unloading acceptable	N			Y		N			N			Y			Y			
	Spill Kits Present	N			Y		N			N			N			N			
	Monitoring & record keeping occurs	N			Y		N			N			N			Y			
Treatment	Treatment per Waste Stream		Tech. Type	Volume (kg/wk)		Tech. Type	Volumes (kg/wk)		Tech. Type	Volume(kg/wk)		Tech. Type	Volume s (kg/wk)		Tech. Type	Volume s (kg/wk)		Tech. Type	Volumes (kg/wk)
	Healthcare Waste	✓	Landfill (w/o treat)	2,500 ¹	✓	Incinerate (internal)	600	✓	Landfill (w/o treat)	250 ²	✓	Concrete Block Incinerate/ Open Burning (internal)	250 ³	✓	Incinerate (internal)	150 ⁴	✓	Bury off site	450 ⁵
	Sharps	✓	Incineration	As above	✓	Incinerate (internal)	600 ⁶	✓	Landfill (without treatment)	As above	✓	Incinerate (internal)	17.5	✓	Incinerate (internal)	As above	✓	Incinerate (internal)	As above
	Pharmaceutical	✓	Crush and dilution	Not known	✓	Incinerate (internal)	189 ⁷	✓	Landfill (without treatment)	Not known	✓	Landfill (without	Not known	✓	Landfill (without treatment)	Not known	✓	Crush and dilution	Not known

³⁷ SPREP, 2014. Baseline Study for the Pacific Hazardous Waste Management Project Healthcare Waste – Solomon Islands. Table 7 updated in March 2021.

			Incineration								treatment)								
	Cytotoxic	×	Incineration	90-100kg	×	NA	NA	×	N/A	NA	×	NA	NA	×	NA	NA	×	NA	NA
	General	✓	Landfill (without treatment)	Not known	✓	Landfill (without treatment)	Not known	✓	Landfill (without treatment)	Not known	✓	Landfill (with treatment)	250 ⁸	✓	Incinerate (internal)	Not known	✓	Landfill (without treatment)	Not known
If incinerator present																			
	Make, Model, Year commissioned	Controlled Air Incinerator, Model CA 30			UHT-300 II 0 UCHIMURAGUM CO. LTD (Made in Japan. Diesel.			Incinerator installed in 2018. Diesel.			Locally made – concrete and iron overhead shelter			Locally made – concrete design			Wood fired - no name		
	Operating Temp (°C)	700-1100			Not known			Not known			Not known			Not known			Not known		
	No. chambers	2			1			1			1			1			1 – locally made		
	Condition	Working			Reasonable			Not working			Poor			Reasonable			Poor		
	Comments	The incinerator is under phase 1 of Pac Waste (SPREP) Used for all clinical wastes including sharps			Two incinerators present. One used for sharps and vials and one for health care waste. (1) Old incinerator open fire currently in use. Fire wood and kerosene. (2) New combust incinerator pending commissioning since 2018. Diesel			Since instalment, the incinerator has not been working. Awaiting for part since then. The wood incinerator not used since 2011.			The current incineration is a homemade one with concrete and iron built because the (mediburn) incinerator build by SPREP doesn't functioning on installation. We continue each year to maintain our current concrete block and iron plate incinerator			The incineration (Photo 26) is to be replaced by a new incinerator which was built on site in the workshop.			The incinerator is only used for the treatment of sharps as residents complain about the fumes. Engine 8 is not functioning..		
Operational statistics																			

	Per year						
	Waste Throughput (kg)	3-400kg/burn	400kh	100kg/per load	Not known	100kg/per load	N/A
	Operating Hours (hr)	2-4 hrs	4hrs	Approx 2 hours	2 hours daily	Approx 2 hours	Approx 2 hours
	Fuel	Diesel	Diesel	Wood	Wood and diesel	Wood	Wood/fuel
	Fuel use (kg/litres)	200l/burn	Not known	Not known	40 litres/week	Not known	
	Fuel use per kg waste burnt	120kg /hr	Not known	Not known	Not known	Not known	Not known
	Technology siting and operation issues	When windy and it smokes can blow directly into nearby residential area. Normally doesn't smoke.	Coastal erosion, sea rise. Wet, windy, uncovered and close to residents (staff residences and offices)	Public are able to access the incinerator area. The area has now become overgrown and derelict.	Incinerator does not get hot enough and fumes enter the hospital due to low heat and low stack.	No proper water supply to the incinerator house + walkway wet and muddy..	Wet, uncovered and close to residents and hospital ward.
	Offsite transport assessment	Fair	Fair	Poor	Fair	Poor	Poor

4.3 COVID-19 Status and Response

4.3.1 Current COVID-19 Status

Solomon Islands was one of 12 countries with no confirmed COVID-19 case until the country's COVID-19-free status ended on October 3, 2020, when an asymptomatic student repatriated from the Philippines tested positive on arrival in Honiara. Between October 2020 and April 2021 there were 20 confirmed cases. Between mid-April 2021 and mid-January 2022 there were zero confirmed cases of COVID-19 in the Solomon Islands³⁸.

An outbreak of the Delta strain of COVID-19 occurred in mid-January 2022³⁹. As of 31 January 2022, the Solomon Islands has recorded 1,486 cases of COVID-19. The number of daily cases recorded on 31 January was 303, although the Health Minister estimated that this could be around 500 based on the current testing capacity, and reports from the communities⁴⁰. In the National Address #3 provided by the Health Minister on 27 January 2022, it was noted some samples have not been processed due to senior laboratory staff being absent due to contracting COVID-19. Many other health care professionals, including 101 staff from the National Referral Hospital (as at 27 January 2022), have contracted COVID and this is placing additional strain on the health care system.

The National Address #3 identified that community transmission of COVID-19 is occurring in Honiara and Malaita Outer Islands and that is likely to also be occurring in Auki in Malaita, Marovo in Western Province and in the Central Islands provinces. There have also been some confirmed cases in other parts of Guadalcanal. In response to the current outbreak, a lockdown and curfew have been implemented in Honiara.

Despite a focus on preventing the spread of COVID-19 from Papua New Guinea to the Solomon Islands the recent outbreak was a result of importation of the virus from an illegal border crossing between Bougainville, Papua New Guinea and the Malaita outer islands (Ontong Java atoll). Subsequently, a passenger boat from Ontong Java to Honiara resulted in the importation into the capital.

4.3.2 National COVID-19 Preparedness and Response

The Solomon Islands has prepared the Consolidated National Preparedness and Response Plan for COVID-19 (issued on March 12, 2020) and an updated Phase 2 plan issued on August 27, 2020. The SIG declared a public health state of emergency on March 26, 2020. This allowed the government to enforce a number of emergency measures and procedures stipulated under its Emergency Act. In early March, MHMS developed a COVID-19 preparedness and response plan (PRP) with support from DFAT, with estimated cost of SBD 20 million (~US\$ 2.42 million) largely for PPEs and Consumables. The MHMS was also allocated a supplementary domestic budget of SBD 6.6 million (~US\$ 0.8 million) to assist with implementing the plan. In August the PRP was revised (Phase 2) to also include all COVID-19 related activities including quarantine, infrastructure, medical equipment and human resources (surge capacity for COVID-19) as well as investments in other sectors, including education, agriculture, and infrastructure. This plan was costed at SBD 334 million (~US\$ 40 million), with 50% estimated funding gap. In addition to this COVID-19 specific lending operation, the World Bank has increased the financing amount for the First Solomon Islands Transition to Sustainable Growth Development Policy Operation

³⁸<https://ourworldindata.org/coronavirus/country/solomon-islands>

³⁹ <https://www.solomontimes.com/news/confirmed-its-the-delta-variant/11546>

⁴⁰ <https://www.solomontimes.com/news/303-new-cases-today-high-recovery-rate-for-health-workers/11538>

(approved in May 2020) from US\$10 million to US\$15 million to respond to critical fiscal needs due to COVID-19; and the Solomon Islands Port Authority and Solomon Power (both state owned entities) have together contributed SBD 10 million (~US\$1.2 million) towards the COVID-19 response.

The Solomon Islands, in addition to the internal domestic support for activities related to COVID-19, is also receiving assistance from several development partners (DPs). These include the United Nations (UN-mainly WHO and UNICEF), who are providing PPE along with laboratory supplies, disease surveillance and response technical assistance, and communications support efforts; DFAT is providing a broad range of ongoing technical assistance, as well as funding for budget support and other health related activities (including quarantine facilities, laboratory and medical equipment), as is the New Zealand MFAT (including upgrading the ICU at the National Referral Hospital and a new x-ray machine). The European Union, Asian Development Bank, and China have all contributed financially and in-kind to the MHMS COVID-19 response efforts. The World Bank FTCF investment support has been designed to fill critical gaps in the preparedness and response efforts and complement activities committed by other DPs. In addition, through a multi-year program of advisory and analytics, the World Bank continues to provide advisory and analytical services to MHMS on health financing and related health system strengthening activities.

The Solomon Islands has established a National Health Emergency Operations Center (NHEOC) to oversee all operations and activities relating to COVID-19. The public health State of Emergency (SOE) remains in effect since March 26, 2020. This allows the government to enforce several emergency measures and procedures stipulated under its Emergency Act. The NHEOC, which was created due to the COVID-19 pandemic, oversees all operations and activities relating to COVID-19. NHEOC reports to the National Disaster Operations Center - Health (NDOC-H) committee which then reports to the Permanent Secretary of MHMS and the Executive Management Team. The NHEOC is located at the NRH and is chaired by a senior medical doctor at NRH. The NHEOC has seven teams reporting to it. These teams are as follows: provincial team, public health team, planning and operation team, clinical team, administration and finance team, and risk-communication team. In addition, the MHMS has established a COVID-19 financing committee to oversee how COVID-19 funds received from various sources are being utilized. The NDOC is located at the MHMS headquarters (physically just across the road from NRH) and is chaired by the Deputy Secretary for Health Improvement.

4.3.3 Testing for COVID-19

Solomon Islands gained the capacity to test for COVID-19 when it acquired two PCR-Polymerase Chain Reaction machine (donated by the People Republic of China and from the Australian Department of Foreign Affairs and Trade (DFAT)). Testing is mainly being conducted in the capital Honiara, but it is also available in Western Province at Gizo hospital. In response to the recent outbreak, additional testing facilities are also being established at Malaita (Kilufi Hospital) and Western Province (Gizo Hospital).

In addition, Solomon Islands has 10 GeneXpert machines located across provincial hospitals (8) and the national referral hospital (2). COVID-19 cartridges for the GeneXpert machines have been pre-ordered (with assistance from Development Partners). These cartridges will strengthen the lab testing capacity of provincial and the national referral hospitals.

4.3.4 Vaccine roll-out

The SIG set a target of 90% vaccination rate for the international borders to re-open. As of 3 January 2022, the number of people vaccinated was:

- Number of people vaccinated with two doses: 85,965 (20.7 of eligible population)
- Number of people vaccinated with one dose: 112,296 (27.1 of eligible population)

The Astrazeneca vaccine and Sinopharm vaccine are both being used in the Solomon Islands. In November 2021, the SIG received its first doses of the Pfizer vaccine which have been earmarked for those aged 12-17, for pregnant women, and for booster shots for health and frontline workers. In late November 2021, however, there was significant social unrest which disrupted the vaccine campaign and halted operations.⁴¹ The vaccine campaign resumed in January 2022 as the unrest subsided.

Barriers to vaccination access noted in the Vaccine Introduction Readiness Assessment Tool include the remoteness of some communities and lack of logistics available for health care staff to reach them to undertake advocacy and communication relating to vaccine uptake. These communities often have no access to internet, mobile communications, and in some cases even radio.

The National Democratic Institute (NDI) conducted national public opinion research related to attitudes toward vaccines⁴². The study, published in August 2021, included a national survey, and focus group discussions across the country. The results show high levels of COVID-19 vaccine hesitancy with 48% of the participants expressing vaccine hesitancy by answering either “not willing at all” (34%) or “not too willing” (14%) when asked the question *“How willing are you to get a COVID vaccine when it is made available in your area - Are you very willing, somewhat willing, not too willing, or not willing at all?”*.

Component 1 will help address vaccine access issues and hesitancy through provision of logistical support for health care workers involved in the vaccine deployment (to enable them to reach remote areas) and support for community engagement related to vaccine demand generation. Anecdotal evidence suggests that there has been a greater uptake of the vaccine since the mid-January 2022 outbreak, with large queues being observed at vaccination centres in Honiara.

MHMS will implement WHO guidance tools for COVID-19 risk communication and engagement, including with respect to social stigma (<https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf>). MHMS has also committed in the Project ESCP to the provision of services and supplies to all people, regardless of their social status, based on the urgency of the need, in line with the latest data related to the prevalence of the cases.

⁴¹ A series of demonstrations and riots in Honiara began on November 24, 2021, resulting in violence, burning, and looting, particularly towards businesses in Honiara’s Chinatown district as well as a police station that was set on fire. Over 150 households were affected and an estimated 1000 people a. The SIG deployed police and at their request, Australia, Fiji Papua New Guinea and New Zealand provided additional police and defense support.

⁴² <https://www.ndi.org/our-stories/ndi-public-opinion-research-approval-solomon-islands-government-covid-19-prevention>

4.3.5 Implementation of Parent Project to Date

An Implementation Support Review for the Parent Project was carried out by the WB team with the MHMS and MOT in July 2021. The Aide Memoire from the mission provides the following update on the implementation.

The Project Rating was satisfactory for the following aspects of the Parent Project: Progress towards achievement of PDO; Implementation Progress; Component 1; Component 3; Management, M&E Financial Management; Procurement; Monitoring and Evaluation; Project Management; and Safeguards. Discussion on the progress of these aspects of the project were largely complimentary of the MHMS.

The Project Rating was moderately satisfactory for Component 2. This component involves renovation and upgrading of two provincial hospitals, national medical store, refurbishment of Zome into a National Health Emergency Center (NHEC), as well as procurement of trucks for health care waste management. The mission noted that the renovation and upgrading activities could be time-consuming and require closer follow up from MHMS to coordinate with relevant government offices. There had been little progress on these activities and considering the time which would be required to complete them, it was noted that they needed to commence as soon as possible to be completed using financing from the Parent Project funds. The interim PMU had been established at the time of the mission and it was thought that once the permanent PMU had established, implementation of these activities would be expedited.

MHMS had no prior experience with the World Bank's ESF prior to the implementation of the parent project. The PMU's environmental and social performance has been satisfactory during the early stages of the Parent Project implementation. Whilst some E&S risk management activities have been slow to progress for the Parent Project, risk management is considered adequate. The Project's GRM has been operationalized and a full-time, local Environmental, Social and Health and Safety and Community Engagement (local E&S specialist) Specialist has been recruited to the PMU within 6 months of effectiveness as required by the parent project ESCP.

The ESHS&CE Specialist is working on development of the environment and social management plans (ESMPs) for the installation of incinerators, with support from the WB E&S specialists. There have been delays in the recruitment of the international part-time Environmental, Social and Health and Safety (ESHS) and it is anticipated that this role will be filled in January 2022. This position will provide support and oversight of scaled up activities under the AF. These resources are considered adequate to support E&S aspects of the Parent Project and Additional Finance. Hands on support is also being provided to the PMU and MHMS from World Bank staff on the ground in Honiara

5 Environment and Social Risks, Potential Impacts and Mitigation

The project is developed to support SI to respond to the COVID-19 pandemic and to strengthen its health system for public health emergency, which is thus expected to result in long-term positive environmental and social impacts. In the short to medium term, however, environmental and social risks are assessed to be Substantial.

5.1 Summary of Main Environmental Risks

The project investments will focus on the provision of equipment, surveillance, case management, upgrades of existing facilities, and capacity building activities. Minor civil works will be undertaken for

the renovation and expansion of ICU capacity within existing facilities, renovation of the National Medical Store and other health facilities in five provinces; as well as the installation of the incinerators. The negative impacts directly associated with construction activities will be minor and can be mitigated through the standard measures outlined in the Project CoESP (Annex II). The main operational environmental risks identified are: (a) OHS issues related to testing, handling of supplies and the possibility that they are not safely used by laboratory technicians and medical crews; (b) OHS issues for medical staff and employees related to the treatment of COVID-19 patients; (c) medical waste management and community health and safety issues related to the handling, transportation, disposal of hazardous and infectious healthcare waste; (d) real or perceived inequities to delivery of services, (e) potential for SEA/SH of COVID patients and frontline health care workers in quarantine.

Recent outbreaks in the country (dengue and measles in 2013/14), low coverage and investment in essential health services, and lack of properly trained healthcare workers exacerbate the environmental risks associated with COVID-19 interventions, despite the availability of readily implementable and effective mitigation measures in the form of WHO guidance, WB EHS Guidelines and other GIIP. As discussed in Chapter 4.2.3, a healthcare waste management baseline study conducted in 2014 under PacWaste identified the inadequacies in health care waste segregation, storage, treatment and disposal, staff training, PPE availability and other OHS management aspects. Many of these identified issues were expected to be addressed by the PacWaste project and JICA investments, including the preparation of a national healthcare waste management strategy (already drafted, but yet to be endorsed at the ministerial level). However, there will continue to be a need for additional interventions to further reduce the public health risks resulting from healthcare waste management (e.g. hospitals not covered by PacWaste, poor maintenance and dysfunction of existing incinerators, etc). The understanding is that the PacWaste Project funded the installation of five incinerators, which none operates properly. A feasibility study is planned during early implementation of the Project to assess the need for new incinerators, as well as the feasibility of repairing the malfunctioning units, with a view to fund these as part of the Project. Although the COVID-19 emergency operation is not expected to generate large incremental volumes of medical waste with high population proximity exposed to this waste; the probability of serious adverse effects to human health from exposure to medical waste is low, the project's environmental risks are considered Substantial due to the prevailing environmental, health and safety risk management capacity constraints in the health sector and the country in general.

5.2 Summary of Main Social Risks

The project is expected overall to have positive impacts at a national scale. The social risks are considered Substantial even as some social risks and impacts (for example quarantine and isolation units, distribution of PPE, medical supplies) are considered temporary, predictable, and readily managed through project design features and standard mitigation measures.

The key social issues are outlined further in Table's 8, 9 and 10 and include the following:

- Occupational and community health and safety impacts from the civil works such as the renovation and upgrading of existing health care facilities (including some demolition and rebuild) and construction of a new building for medical storage.
- Increase in sexual exploitation and abuse/ harassment (SEA/SH) related to the contractor(s) workforce.

- OHS risks related to exposure to infections / diseases e.g. from testing, laboratory and health care waste, treatment of COVID-19 patients etc.
- OHS risks related to travel to remote areas.
- Community health and safety issues related to the handling, transportation and disposal of hazardous and infectious health-care wastes.
- Real or perceived inequities regarding access to project health services that lead to conflict or civil unrest.
- Project activities have the potential to contribute to virus transmission.
- SEA/SH risks for COVID patients and frontline health care workers in quarantine.
- General OHS risks for medical store and NHEC staff e.g. slips, trips, falls.
- OHS impacts to staff operating the incinerator(s).
- Provision of private or government security personnel leads to human rights violations, diversion of materials, aid and assistance etc.

The project will not finance the purchase of any COVID-19 vaccines. The Project will strengthen institutional capacity, immunization systems and service delivery capacity to the level required to successfully deliver COVID-19 vaccines at scale. The deployment of a COVID-19 vaccine presents risks concerning the health and safety of the vaccine. MHMS has committed, through the ESCP, to providing sufficient evidence of vaccine safety and efficacy before vaccine deployment. The Project is not involved in and does not directly support the implementation of any no-jab-no-job policies.

5.3 Preliminary Risk Analysis

The following tables provide a preliminary analysis of the type of project activities identified, potential social and environmental impacts that may result from the project activities, key mitigation methods for residual impacts, and environmental and social risk management tools that are required.

In addition to the risks identified in the following tables, the WB team will screen E&S risks associated with activities that have that already been undertaken and will be financed retroactively. The screening will comprise of a due diligence check/audit on activities already funded to check they have complied with ESF requirements before funds for these activities are disbursed.

Table 8 – Assessment of key project risks/impacts and proposed mitigation methods – planning and design stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	E&S Risk Management Tools
Planning and Design Stage			
Procurement of goods and supplies (subcomponents 1.1, 1.2, 2.1)	<p>Failures in procurement process e.g. incorrect standard or quality of PPE leads to spread of infection to health-care workers.</p> <p>Procurement and use of goods will not be sustainable.</p> <p>Failure in procurement process leads to vehicles and/or boat with substandard safety measures e.g., lack of seatbelts</p>	<p>Due diligence and assessments will be undertaken by MHMS to ensure fit for purpose equipment is procured.</p> <p>ESHS provisions incorporated into bidding documents, in accordance with the new World Bank Procurement Framework. Bidding documents to be reviewed by the PMU E&S specialist/s and World Bank E&S specialists prior to procurement.</p> <p>The MHMS purchases will follow the WHO interim guidance on rational use of PPE for coronavirus disease 2019 which describes the types of PPE that are required for different functions.</p> <p>Sustainable use of goods and materials will be encouraged through capacity building and training of health service personnel.</p>	N/A
Design of health-care facilities e.g. refurbishment of quarantine facilities, isolation units, and health care facilities (subcomponents 1.1, 2.1)	<p>Design of refurbished health-care facilities do not meet layout and engineering requirements for nosocomial infection control, increasing risk of spreading COVID-19 in health facilities.</p> <p>Design of waste management facilities are inappropriate, do not allow for the separation of infectious and non-infectious waste increasing the risk of spreading COVID-19.</p> <p>Design of refurbished facilities does not consider universal access e.g. women, children, elderly, and users with disabilities.</p>	<p>Design of facilities will reflect guidance from WHO and/or Centre for Disease Control and Prevention (CDC) on COVID-19 management and infection control as detailed in the Project's CoESP.</p> <p>Design of facility will follow guidance from WHO and/or CDC on health-care waste management and infection prevention control as detailed in the MHMS IPCG (Annex VI).</p> <p>Consideration of the need for differentiated access for different users of the facilities in the design as detailed in the Project CoESP. Consultation in accordance with the SEP to ensure proposed project</p>	<p>CoESP</p> <p>SEP</p> <p>MHMS IPCG</p>

	<p>Refurbished facilities that are not covered by adequate life and fire safety (L&FS) risk assessment and mitigation measures.</p> <p>Asbestos, lead from lead paints, synthetic mineral fibre (SMF), ozone depleting substances (from old air conditioning units) and polychlorinated biphenyls (PCBs) may be present in structures to be renovated or demolished.</p>	<p>sites can be utilized for project infrastructure activities.</p> <p>L&FS master planning will be included in the design of the facilities in line with GIIP and national legal requirements. MHMS will ensure that all national legal L&FS requirements are met, upon completion of the refurbishments. The facilities should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression; Smoke Control.</p> <p>Designers to undertake building inspection(s) that identifies whether asbestos or other hazardous materials are present prior to renovations /refurbishments commencing. If found, a hazardous material management procedure must be detailed in WMP(s) to be developed during project by the contractor (refer to Table 9).</p> <p>Project's SEP will ensure widespread engagement with communities - including its more vulnerable groups - to disseminate information related to community health and safety.</p>	
Design of the NMS refurbishment (subcomponents 2.1)	<p>Facilities that are not covered by adequate life and fire safety (L&FS) risk assessment and mitigation measures.</p> <p>Designs not providing for pharmaceutical or chemical storage and disposal.</p> <p>Asbestos, lead from lead paints, synthetic mineral fibre (SMF), ozone depleting substances (from old air conditioning units) and polychlorinated biphenyls (PCBs) may be present in the medical store to be renovated.</p>	<p>L&FS master planning will be included in the design of the refurbished facility in line with GIIP and national legal requirements. MHMS will ensure that all national legal L&FS requirements are met, upon completion of the installation. The medical store should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression; Smoke Control.</p> <p>Design should be developed for proper chemical handling, storage and disposal in accordance with the substances Material Safety Data Sheet(s) (MSDS(s)), and GIIP such as ISO standards on the handling and storage of chemicals from the ISO</p>	<p>CoESP</p> <p>SEP</p> <p>Land Commitment Guide</p>

		<p>14001 Documentation Toolkit, the ESF, and Solomon Islands law.</p> <p>Designers to undertake building inspection(s) that identifies whether asbestos or other hazardous materials are present prior to refurbishment commencing.</p>	
Design of the NHEC refurbishment (Subcomponent 2.1)	<p>Facilities that are not covered by adequate life and fire safety (L&FS) risk assessment and mitigation measures.</p> <p>Asbestos, lead from lead paints, synthetic mineral fibre (SMF), ozone depleting substances (from old air conditioning units) and polychlorinated biphenyls (PCBs) may be present in structures to be renovated.</p>	<p>L&FS master planning will be included in the design of the facility in line with GIIP and national legal requirements. MHMS will ensure that all national legal L&FS requirements are met, upon completion of the installation. The facility should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression; Smoke Control.</p> <p>Designers to undertake building inspection(s) that identifies whether asbestos or other hazardous materials are present prior to refurbishment commencing.</p> <p>Consultation to ensure proposed site can be utilized for Project activities.</p>	<p>CoESP</p> <p>SEP</p>
Procurement and location of the incinerators (subcomponent 2.1)	<p>Failures in procurement process e.g. incinerators are not fit for the purpose and could lead to:</p> <ul style="list-style-type: none"> incinerators unable to operate at a high enough temperature to kill the virus. incinerators do not have measures to reduce air quality issues e.g. scrubbers. <p>Incorrect siting of incinerators which affects the dispersion of the plume from the chimney causing reduced air quality and/or community and OHS issues.</p> <p>Incorrect siting of the ash pit(s) leads to air, land and/or water pollution and/or causes a nuisance to sensitive receptors.</p>	<p>A feasibility study is planned during early implementation of the Project to assess the need for new incinerators, as well as the feasibility of repairing the malfunctioning units, with a view to fund these as part of the Project. The feasibility study will advise on the best fitting incinerator type and site locations and alternatives for the incinerator(s) and ash pit(s). The proper design of the incinerators should achieve desired temperatures, residence times, and other conditions necessary to destroy pathogens. Ash pits must be located away from water bodies and sensitive receptors. The feasibility study terms of reference (ToR) and final report will be reviewed by the PMU</p>	<p>Feasibility Study</p> <p>ESMP (WB) incorporating PER/EIS (Solomon Islands)</p> <p>SEP</p>

		<p>E&S specialist/s and World Bank E&S specialists prior to procurement of the incinerators.</p> <p>If the incinerators are procured, an ESMP will be required to manage the environmental and social impacts associated with the incinerator(s) location, installation and operation and ash pit(s) location prior to the commencement of procurement. The ESMP will confirm that emissions are compliant with the ESF and EHSGs and that locations proposed minimize nuisance and air quality impacts on nearby residents. An ESMP template is included in Annex V.</p> <p>The incinerators likely meet the definition of a Prescribed Development ('waste management system') and will require a development consent and either a PER or EIS to be determined in consultation with the ECD during Project implementation. The ECD environmental approval process will be followed by the PMU E&S specialists to determine what level of environmental assessment (PER or EIS) will be needed for the incinerators. If a PER or EIS is determined during project implementation to be required by ECD, the PER/EIS can be incorporated into the ESMP prepared in accordance with the World Bank ESF.</p> <p>The World Bank, MHMS and ECD will review and approve the incinerators specifications and proposed locations based on the feasibility study prior to procurement of the incinerators. ESHS provisions will be incorporated into bidding documents, in accordance with the new World Bank Procurement Framework.</p> <p>Public consultation shall be undertaken to ensure the proposed locations within the individual health facilities can be utilized for the incinerators to</p>	
--	--	--	--

		minimize nuisance and air quality impacts on nearby residents.	
Procurement of waste management equipment e.g. trucks (subcomponent 2.1).	<p>Failures in procurement process e.g. equipment that is inappropriate and could lead to:</p> <ul style="list-style-type: none"> • spread of infection to workers. • causes health & safety risks to workers. • causes adverse environmental harm. 	<p>Due diligence and assessments will be undertaken by MHMS regarding purchase of equipment to ensure correct fit for purpose equipment is procured to Solomon Islands standards.</p> <p>ESHS provisions incorporated into bidding documents, in accordance with the new World Bank Procurement Framework.</p>	N/A
Vaccine readiness and prioritization, including surveillance of adverse events following immunization	<p>Failures in vaccine readiness results in ineffective vaccine rollout and wasted vaccines.</p> <p>Failures in vaccine prioritization results in vulnerable people and other high priority groups not prioritized for vaccination.</p> <p>Failures in surveillance of adverse events following immunization results in lack of medical care for people who experience an adverse reaction and incomplete safety data recorded.</p> <p>Social and economic costs for individuals and households to get vaccinated.</p>	<p>Provision of services and supplies to all people, regardless of their social status, based on the urgency of the need, in line with the latest data related to the prevalence of the cases.</p> <p>Completion of activities in the Solomon Islands COVID-19 Vaccine Introduction Readiness Assessment Tool⁴³ which measures readiness across ten key areas relating to country readiness: Planning and coordination, Budgeting, Regulatory, Prioritization, Targeting, and COVID-19 Surveillance, Service Delivery, Training and Supervision, Monitoring and Evaluation, Vaccine, Cold Chain, Logistics, and Infrastructure Safety Surveillance, and Demand Generation and Communication.</p> <p>The National Deployment and Vaccination Plan for COVAX⁴⁴ places focus on vaccination of remote border communities and resident of larger cities. The following target groups for prioritisation are also</p>	<p>Project ESCP</p> <p>COVID-19 Vaccine Introduction Readiness Assessment Tool</p>

⁴³ This document was developed by WHO, UNICEF and World Bank Group to support Ministries of Health in developing a roadmap to prepare for vaccine introduction and identify gaps to inform areas for potential support. The Solomon Islands COVID-19 Vaccine Introduction Readiness Assessment Tool will be updated by MoH and attached to the Project Appraisal Document and should be finalized before Additional Financing is released.

⁴⁴ Ministry of Health Medical Sciences. December 2020. National Deployment and Vaccination Plan for COVID-19 Vaccines v4.

		<p>provided: (1) frontline workers, (2) the elderly, (3) persons with underlying medical conditions, (4) persons with compelling reasons to travel, and (5) the remaining population.</p> <p>The implementation of Component 1 of the project will reduce the transport costs for individuals and households to get vaccinated through provision of logistical support for health care workers involved in the vaccine deployment to enable them to reach remote areas.</p>	
--	--	---	--

Table 9 – Assessment of key project risks/impacts and proposed mitigation methods – renovation/refurbishment/construction stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	E&S Risk Management Tools
Renovation/Refurbishment/Demolition/Construction Stage			
Renovations and refurbishments such as: <ul style="list-style-type: none"> • Quarantine facilities (subcomponent 1.1) • Isolation units (subcomponent 1.1) • ICUs (subcomponent 2.1) • The NMS (subcomponent 2.1) • Zone building to establish NHEC (subcomponent 2.1) • Installation of the incinerators (subcomponent 2.1) • Health care facilities (subcomponent 2.1) 	<p>Civil works may generate limited adverse environmental impacts such as extraction of materials, nuisances from dust, noise, vibration; pollution from erosion and uncontrolled sediment; minor hydrocarbon spills; and traffic obstruction.</p> <p>Incorrect waste disposal causing negative impacts to soil and groundwater or on community and/or worker health.</p> <p>Asbestos, lead from lead paints, synthetic mineral fibre (SMF), ozone depleting substances (from old air conditioning units) and polychlorinated biphenyls (PCBs) may be present in old buildings or demolition debris.</p> <p>Occupational health and safety (OHS): refurbishment/demolition/construction activities pose various OHS risks such as working at heights, suspended loads, handling hazardous materials (e.g. asbestos) and sprains, strains, cuts and crush injuries etc.</p> <p>Community health and safety: refurbishment/demolition/construction activities pose a risk to community members (including patients and medical staff at using/working at clinics under refurbishment) through increased noise, dust and traffic, storage and delivery of oxygen, and the incorrect disposal of hazardous materials.</p> <p>Issues related to inappropriate worker accommodations which further spread COVID-19.</p>	<p>Renovation impacts managed and monitored in accordance with the Project's CoESP.</p> <p>Waste minimization and management measures detailed in Waste Management Plan(s) WMP(s) to be developed during project by the contractor and submitted to the PMU E&S Specialists for approval prior to any physical works commencing. Plans will need to include details of how each waste stream will be appropriately managed and consider the volume of waste to be produced (particularly for those facilities being demolished).</p> <p>If asbestos or other hazardous materials are found during the building inspections undertaken by the designers at the design stage, a hazardous material management procedure must be developed and detailed in WMP(s) developed during project by the contractor in accordance with GIIP and submitted to the PMU E&S Specialists for approval prior to any physical works commencing. Building inspection that identifies whether asbestos or other hazardous materials are present prior to physical works commencing. Asbestos containing materials managed in accordance with GIIP as detailed in the CoESP. No asbestos containing materials used for renovations / refurbishments.</p> <p>Health and Safety (H&S) management plan(s) to be developed during project by the contractor, and refurbishment works completed accordingly. H&S management plan(s) must consider community safety (including safety patients and medical staff at using/working at clinics under refurbishment) and be developed and submitted to the PMU E&S Specialists for</p>	<p>CoESP</p> <p>Waste Management Plan(s) (contractor)</p> <p>H&S Management Plan(s) (contractor)</p> <p>LMP</p> <p>GM</p> <p>CFP</p>

	<p>Increase in sexual exploitation and abuse/ harassment (SEA/SH) related to workforce</p> <p>Cultural heritage impacts.</p> <p>Impacts to provision of existing medical services due to refurbishment and/or demolition of existing medical facilities.</p>	<p>approval prior to any physical works commencing. A Traffic management plan must be included in the Contractor(s) H&S Management Plan.</p> <p>Labour issues including working conditions, OHS, SEA/SH addressed in Project's LMP and CoESP. Implementation of Code of Ethics and Professional Conduct. Provide separate facilities for female and male workers.</p> <p>Project GM available to enable communities to raise project related concerns and grievances.</p> <p>Chance Finds Procedure (CFP) in place prior to any physical works commencing (Annex III).</p> <p>MHMS to prepare plan for each facility undergoing renovation and/or rebuild to plan how impacts to existing medical services will be minimised during works.</p>	
--	--	--	--

Table 10 – Assessment of key project risks/impacts and proposed mitigation methods – operational stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	E&S Risk Management Tools
Operational Stage			
Use of goods and supplies (subcomponent 1.1, 1.2)	<p>Incorrect use of PPE leads to spread of infection to health-care workers and cleaners.</p> <p>Inequitable distribution of goods. Negative reaction to perceived unfairness of resource distribution.</p>	<p>MHMS Infection Prevention Control Guidelines (IPCG) followed (Annex VI).</p> <p>Clear communication of risks and prevention measures will be included in training and stakeholder engagement activities and covered under the National Covax Communication Plan & Strategy (NCCPS)</p> <p>MHMS has committed to the provision of services and supplies to all people in the project ESCP.</p>	<p>MHMS IPCG</p> <p>SEP</p> <p>MHMS NCCPS</p>
Health-care workers health and safety (subcomponents 1.1, 2.1)	<p>OHS risks related to exposure to infections / diseases e.g. from testing, laboratory and health care waste, treatment of COVID-19 patients etc.</p> <p>Surfaces of imported materials may be contaminated during handling and transportation which may result in the spread of infection.</p> <p>OHS risks related to the delivery and storage of goods, including samples, pharmaceuticals, reagents and other hazardous materials.</p> <p>General OHS risks from working in a medical facility /laboratory e.g. manual handling injuries, such as sprains and strains from lifting and carrying patients; falls, trips, and slips; injuries caused by moving objects; sharps injuries, and mental stress fatigue, psychological distress, stigma.</p>	<p>MHMS IPCG followed (Annex VI).</p> <p>Training of personnel financed under component 2(a) and 2(e) on hospital infection control, testing, waste management, and disease surveillance.</p> <p>A Labour Management Procedure (LMP) developed and implemented to protect project direct workers and contracted staff who may be at risk of exposure to infected patients, hazardous waste etc.</p> <p>If concerned about contaminated imported materials (for example when dealing with goods that have come from countries with high numbers of infected people) equipment may be decontaminated using disinfectant. After disinfecting, workers should wash hands with soap and water or use alcohol -based hand rub.</p> <p>Clear communication of risks and prevention measures will be included in training and stakeholder engagement activities.</p>	<p>MHMS IPCG</p> <p>LMP</p> <p>SEP</p>

COVID-19 testing and diagnosis (Subcomponents 1.1, 2.1)	<p>Improper collection of samples and testing for COVID-19 and appropriate laboratory biosafety could result in spread of disease to medical workers or laboratory workers, or population during the transport of potentially affected samples.</p>	<p>MHMS IPCG followed (Annex VI).</p> <p>Collection of samples, transport of samples and testing of the clinical specimens from patients meeting the suspect case definition will be performed in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases. Tests will be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures.</p> <p>National guidelines on laboratory biosafety will be followed. There is still limited information on the risk posed by COVID-19, but all procedures will be undertaken based on a risk assessment. For more information related to COVID-19 risk assessment, see specific interim guidance document: WHO interim guidance for laboratory biosafety related to 2019-nCoV.</p> <p>Samples that are potentially infectious materials (PIM) will be handled and stored as described in WHO guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses (PIM Guidance).</p> <p>For general laboratory biosafety guidelines, see the WHO Laboratory Biosafety Manual, 3rd edition.</p>	<p>MHMS IPCG</p> <p>LMP</p>
Isolation, care and treatment of COVID-19 patients in healthcare facilities (subcomponents 1.1, 2.1)	<p>Weak compliance with the precaution measures for infection prevention and control in isolation and treatment of infected cases spreads COVID-19 infections in healthcare facilities.</p>	<p>MHMS IPCG followed (Annex VI).</p> <p>Health facilities will follow the MHMS IPCG and establish and apply Standard Precautions including:</p> <ul style="list-style-type: none"> • Hand Hygiene (HH); • Respiratory hygiene/cough etiquette. • Use of PPE; 	<p>MHMS IPCG</p>

		<ul style="list-style-type: none"> • Handling of patient care equipment, and soiled linen; • Environmental cleaning; • Prevention of needle-stick/sharp injuries; • Appropriate Health Care Waste Management. <p>In addition, health facilities will establish and apply transmission-based precautions (contact, droplet, and airborne precautions) as well as specific procedures for managing patients in isolation room/unit.</p> <p>Establishment of standard precautions and transmission-based precautions will be in line with National guidelines for IPC in healthcare facilities and take into account guidance from WHO and/or CDC on COVID-19 infection control:</p> <ul style="list-style-type: none"> ✓ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected; ✓ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources); ✓ CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings; and ✓ CDC guidelines for environmental infection control in healthcare facilities. <p>Special considerations will be made to address the particular needs of vulnerable groups in delivering these services.</p> <p>Training of personnel financed under component 2(a) and 2(e) on hospital infection control and disease surveillance.</p>	
Generation of health care wastes (Subcomponents 1.1, 2.1)	Medical waste management and community health and safety issues related to the handling, transportation and disposal of hazardous and infectious health-care wastes with respect to both	Methods outlined in section 4.8 of the MHMS IPCG, such as colour coding or labelling of containers, followed (Annex VI) to ensure the correct separation, storage,	MHMS IPCG

	<p>disease transmission and contamination of the receiving environment such as soil or water.</p> <p>Offsite disposal facilities (if used) do not comply with standards required by transport and disposal regulations and for licensing of transport vehicles.</p>	<p>transport and disposal of health care wastes (both infectious, hazardous and non-infectious wastes).</p> <p>Training of personnel on waste management financed under component 2(b) to ensure compliance with the MHMS IPCG, WHO guidance and GIIP.</p> <p>The Project will investigate the procurement of appropriate waste management infrastructure e.g. incinerators and waste disposal transport equipment i.e. four fuel-efficient trucks.</p>	
Poor sanitation and improper management of wastewater (Subcomponents 1.1, 2.1)	<p>Poor sanitation and improper management of wastewater related to COVID-19 diagnosis and treatment services transmitting diseases to communities and polluting environment.</p>	<p>MHMS IPCG followed (Annex VI).</p> <p>Health facilities will ensure the provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak.</p> <p>Health facilities will establish and apply good practices in line with WHO guidance on water, sanitation and waste management for COVID-19, and the MHMS IPCG.</p>	MHMS IPCG
Community impacts (Subcomponents 1.1, 2.1)	<p>Risk of COVID-19 transmission in the community from project activities e.g. operation of the health-care facilities, incinerator, etc. if not properly managed and controlled.</p> <p>Wider public and patients are not treated with respect for their dignity, human rights and fundamental freedoms.</p> <p>Real or perceived inequities regarding access to project health services that lead to conflict or civil unrest.</p>	<p>The MHMS IPCG (Annex VI) contains detailed procedures for the safe operation of health facilities and protection of the public from exposure to the virus as a result of these operations.</p> <p>The operation of quarantine and isolation units will be implemented in a way that both the wider public, as well as the patients are treated in line with international best practice as outlined in WHO guidelines. Patients will be treated with respect for their dignity, human rights and fundamental freedoms and minimize any discomfort or distress associated with such measures taking into consideration their gender, sociocultural, ethnic or religious needs</p>	<p>MHMS IPCG</p> <p>SEP</p> <p>GM</p>

		<p>MHMS has committed in the Project ESCP to the provision of services and supplies to all people, regardless of their social status based on the urgency of the need, in line with the latest data related to the prevalence of the cases.</p> <p>The Project's SEP will ensure widespread engagement with communities - including its more vulnerable groups - to disseminate information related to community health and safety, particularly about social distancing, high-risk demographics, self-quarantine, and mandatory quarantine.</p> <p>Grievance mechanism (GM) enables communities to raise project related concerns and grievances.</p>	
Sexual Exploitation and Abuse SEA)/SH risks (Subcomponents 1.1, 2.1)	SEA/SH risks for COVID patients and frontline health care workers in quarantine.	<p>MHMS has committed in the Project ESCP to the implementation of a Code of Ethics and Professional Conduct which includes provisions for SEA/SH prevention as well as the provision of gender-sensitive infrastructure such as segregated toilets.</p> <p>MHMS has committed in the Project ESCP to engage a GBV specialist to ensure quality messaging of the risk of GBV which will include a communication campaign in all forms of community health outreach in all phases of the emergency response.</p> <p>All training for healthcare workers will include a module on the identification and management of GBV cases.</p> <p>The Project will ensure that quarantine and isolation centers are operated effectively throughout the country, including in remote areas, including GBV support in quarantine facilities.</p>	<p>SEP</p> <p>MHMS NCCPS</p>
Vulnerable groups access to project	Marginalized and vulnerable social groups are unable to access facilities and services designed to	MHMS has committed in the Project ESCP to the provision of services and supplies to all people, regardless of their	SEP

services and facilities (Subcomponents 1.1, 1.2, 2.1)	combat the disease, in a way that undermines the central objectives of the project	social status, based on the urgency of the need, in line with the latest data related to the prevalence of the cases. MHMS will implement WHO guidance tools for COVID-19 risk communication and engagement, including with respect to social stigma (https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf).	
Operation of the NMSs (Subcomponent 2.2)	Incorrect storage and disposal of medical supplies leads to community and/or worker health and safety impacts and/or water/soil pollution. General OHS risks for medical store staff e.g. slips, trips, falls. Risk of increased SEA/SH.	Waste management plan (WMP) that addresses correct disposal of chemical and other solid wastes to be prepared by the MHMS and submitted to the PMU E&S specialists for approval. Health and Safety management plan for NMS operation to be prepared by the MHMS and submitted to the PMU E&S specialists for approval. Labour issues including working conditions, OHS, SEA/SH addressed in Project's LMP. Implementation of Code of Ethics and Professional Conduct. Provide separate facilities for female and male workers.	WMP H&S Plan. LMP
Operation of the NHEC (Subcomponent 2.1)	General OHS risks for staff. Risk of increased SEA/SH.	Health and Safety management plan for operation of the NHEC to be prepared by the MHMS and submitted to the PMU E&S specialists for approval. Labour issues including working conditions, OHS, SEA/SH addressed in Project's LMP. Implementation of Code of Ethics and Professional Conduct. Provide separate facilities for female and male workers.	H&S Plan. LMP
Capacity building and training activities (Subcomponents 1.1, 2.1, 2.2)	Outcomes that are contrary to health-care workers' well-being and/or activities have adverse environmental impacts.	MHMS IPCG followed (Annex VI). Environmental, social, and health and safety best practices incorporated into training programs.	MHMS IPCG SEP/GM

	<p>Negative reaction to perceived unfairness of health-care workers' access to training.</p>	<p>PMU E&S specialists will review any interim and progress reports to ensure that environmental and social mitigation measures are in place.</p> <p>Project objectives and operational strategies clearly communicated through SEP to address any perception of inequitable access to training.</p> <p>GM to address concerns regarding distribution of project benefits.</p>	
<p>Operation of incinerators (Subcomponent 2.1)</p>	<p>Air quality negatively impacted by incinerators e.g. POP emissions when not operated at the correct temperatures. Incinerators can generate particulates, heavy metals, dioxins and furans, which may be present in the waste gases, water or ash.</p> <p>Incorrect disposal of ash causing adverse environmental and social impacts e.g. soil contamination and/or spreading the virus.</p> <p>Other minor environmental impacts associated with the operation of the incinerator such as minor fuel spills.</p> <p>Community health and safety impacts from reduced air quality due to the incorrect positioning or operation of the incinerator.</p> <p>OHS impacts to staff operating the incinerator (contact with contaminated medical waste, reduced air quality and use of combustible fuel etc.)</p> <p>Operation of incinerators is not hot enough to kill the virus.</p> <p>Lack of ongoing maintenance causing incinerators to no longer operate or operate inefficiently.</p>	<p>The PMU E&S Specialists will develop an Environmental and Social Management Plan (ESMP) for the incinerators and screen for sensitive receptors e.g. schools, day care facilities, patient wards, residential areas.</p> <p>The incinerators likely meet the definition of a Prescribed Development ('waste management system') and will require a development consent and either a PER or EIS to be determined by the ECD during Project implementation. The ECD environmental approval process will be followed by the PMU E&S Specialists to determine what level of environmental assessment (PER or EIS) will be needed for the incinerators. The PER/EIS can be incorporated into the ESMP prepared in accordance with the World Bank ESF.</p> <p>Waste Management and Health and Safety plans for incinerator operation will be prepared by the MHMS and submitted to the PMU E&S Specialists for approval prior to commencement of operations.</p> <p>Training for operators on operation in accordance with GIIP including the method to achieve the desired combustion conditions and emissions will be provided under Component 2(b); for example, appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature before waste is burned, use of appropriate loading/charging rates (both</p>	<p>ESMP (WB) incorporating PER/EIS (Solomon Islands) WMP</p> <p>E&S Plan</p> <p>Operator capacity building and training plan(s)</p> <p>Operation and maintenance plan(s)</p>

		<p>fuel and waste) to maintain appropriate temperatures, proper disposal of ash and equipment to safeguard workers. Operator capacity building and training plans will be prepared by the MHMS and submitted to the PMU E&S Specialists for approval prior to commencement of operations.</p> <p>Project will develop and implement operation and maintenance plans that specify the responsibilities for regular maintenance schedules to replace or repair defective components. Operation and maintenance plans will be prepared by the MHMS and submitted to the PMU E&S Specialists for approval prior to commencement of operations.</p>	
Use of waste management equipment e.g. trucks (subcomponent 2.1)	<p>Medical waste management and community health and safety issues related to the handling, transportation and disposal of hazardous and infectious health-care wastes with respect to both disease transmission and contamination of the receiving environment such as soil or water.</p> <p>General OHS risks for waste management workers using equipment such as the trucks e.g. vehicle and pedestrian interactions.</p> <p>Lack of maintenance causing OHS impacts for waste management workers.</p>	<p>Methods outlined in section 4.8 of the MHMS IPCG followed (Annex VI).</p> <p>Training of personnel financed under component 2(b) to ensure compliance with the MHMS IPCG and WHO guidance and GIIP.</p> <p>Health and Safety management plan / code of practice for vehicle operation to be prepared by MHMS and submitted to the PMU E&S Specialists for approval prior to commencement of operations.</p> <p>To ensure sustainability of the equipment purchased through the Project, MHMS will ensure adequate maintenance budget is included in the annual budget appropriation.</p>	<p>MHMS IPCG</p> <p>H&S Plan</p>
Civil unrest, including presence of Government security personnel	<p>Risk of harm to project workers due to civil unrest, including actions taken by Government security personnel in response to unrest.</p>	<p>Measures to address risk to be included in OSH guidelines that are to be developed as per the requirements of the LMP. Measures to include closure of worksites in event of civil unrest.</p>	N/A

6 Procedures to Address Environmental and Social Issues

6.1 Overview of the Screening Process

The screening process will be used to screen all Project activities for risks and then identify the environmental and social risk management tools that need to be prepared or followed. The purpose of the screening is to: (i) determine whether activities are likely to have potential negative environmental and social risks and impacts; (ii) identify appropriate mitigation measures for activities with adverse risks or impacts; (iii) incorporate mitigation measures into implementation of the activity; (iv) review and approve the management plan/s and (v) monitor application of management plan/s for those activities requiring E&S due diligence.

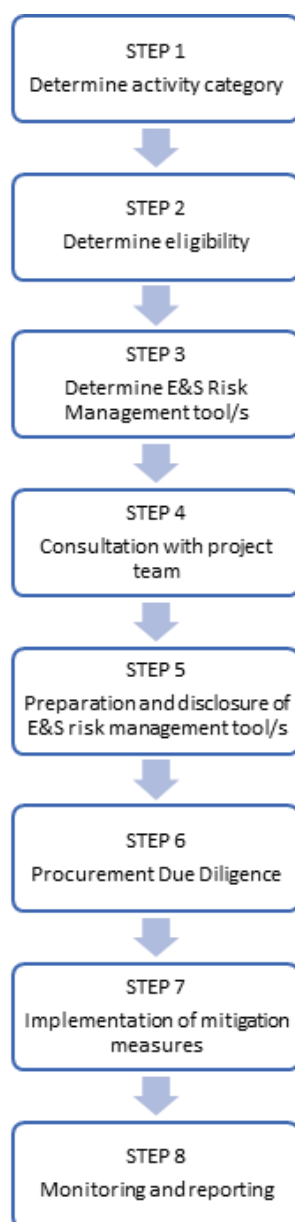
The project typologies identified as requiring environmental and social screening and management during implementation of the Project include: procurement and use of goods and supplies; refurbishment and operation of the health-care facilities (quarantine facilities, isolation units, ICUs); refurbishment and operation of the NMS; refurbishment and operation of the NHEC; capacity building and training activities; procurement, installation and operation of the incinerators; and procurement and use of waste management equipment.

The local ESHS&CE Specialist, supported by the International ESHS Specialist (E&S Specialists), to be employed in the MHMS PMU, will undertake the environmental screening, preparation and disclosure of site-specific instruments, ECD development consent applications and preparation of additional E&S instruments (ESMP, as required), and consultation and information dissemination activities with relevant stakeholders. The interim PMU shall supply the services of its Safeguards Officer for a period of up to 6 months or until the ESHS&CE specialist has been recruited. Responsibilities for implementing these procedures are outlined in further detail in Section 8. The screening process should be reviewed after 12 months of project implementation by the E&S Specialists to ensure that the process is appropriate.

6.2 Screening of Project Activities

The following provides the steps that will be undertaken in the assessment of project activities. The screening of activities will take place either during the annual work plan or on ad hoc basis as activities are defined by the Project Team/s. The screening process will follow the key steps in Figure 2:

Figure 2 – Key Activity Screening Steps



Step 1 - Determine Activity Category

The first step of screening is to determine what type of activity is being proposed and determine the immediate next step. To determine the project activity category, refer to Figure 3 – Activity Screening Process.

Step 2- Determine Eligibility

If the activity has been pre-screened as part of Chapter 5 and is eligible for project funding, proceed directly to Step 3 – Determine Environmental and Social (E&S) Risk Management Tool/s.

If the activity has not been pre-screened as part of Chapter 5, and E&S risk management tool/s already identified, the next step is to complete the Screening Form for Potential Env & Social Issues (Annex IV)

and check Table 11 – Ineligible Activities to determine the activities eligibility for project funding and to screen for risks. The purpose of screening is to (i) determine whether activities are eligible to be financed, and likely to have potential negative environmental and social risks and impacts; and (ii) identify appropriate mitigation measures for activities with adverse risks or impacts.

Step 3 – Determine E&S Risk Management Tool/s

The third step is to determine what specific E&S risk management tool/s are required or apply, if any, under World Bank and Solomon Islands E&S risk management requirements. The project activity screening process (Figure 3 – Activity Screening Process) will assist in determining the E&S risk management tool/s that need to be prepared or followed, if any, for pre-screened activities. For activities not pre-screened, the completed Screening Form for Potential Env & Social Issues (Annex IV) will identify what specific E&S risk management tool/s are required or apply, if any.

Step 4: Consultation with Project Team

If required, the screening outcomes will be discussed with the project team and design personnel to identify ways to reduce or avoid any adverse impacts. Any adjustments to the design, categorization or E&S risk management tool/s can be refined following this process.

Step 5: Preparation and Disclosure of E&S Risk Management Tools

If required, the next step is to prepare the relevant E&S risk management tool/s, both for Solomon Islands and WB processes. This process may include site visits and data gathering, consultation, and public disclosure of the documents in accordance with the Section 7 – Consultation and Stakeholder Engagement.

Step 6 - Procurement Due Diligence

Determine if procurement is required for the activity. If yes, then ESHS provisions will be incorporated into bidding documents, in accordance with the new World Bank Procurement Framework.

Step 7: Implementation of Mitigation Measures

The implementation of the E&S risk management tool/s and conditions of any environmental approvals will need to be implemented, monitored and enforced. Training of implementing staff may be needed to ensure that conditions of the E&S risk management tool/s are met. For contractors, monitoring and supervision will be needed to ensure that conditions of the E&S risk management tool/s are met.

Step 8: Monitoring and Reporting

Monitoring is required to gather information to determine the effectiveness of implemented mitigation and management measures and to ensure compliance with the approved E&S risk management tool/s. Monitoring methods must provide assurance that E&S risk management tool/s measures are undertaken effectively.

Six-monthly reports will need to be prepared and provided to the WB. The semi-annual E&S monitoring reports to the Bank will include: (i) the status of the implementation of mitigation measures; (ii) the findings of monitoring programs; (iii) stakeholder engagement activities; (iv) grievances log; and (v) any incidents/accidents with adverse impacts and the actions taken to address it and prevent reoccurrence

Figure 3 –Activity Screening Process

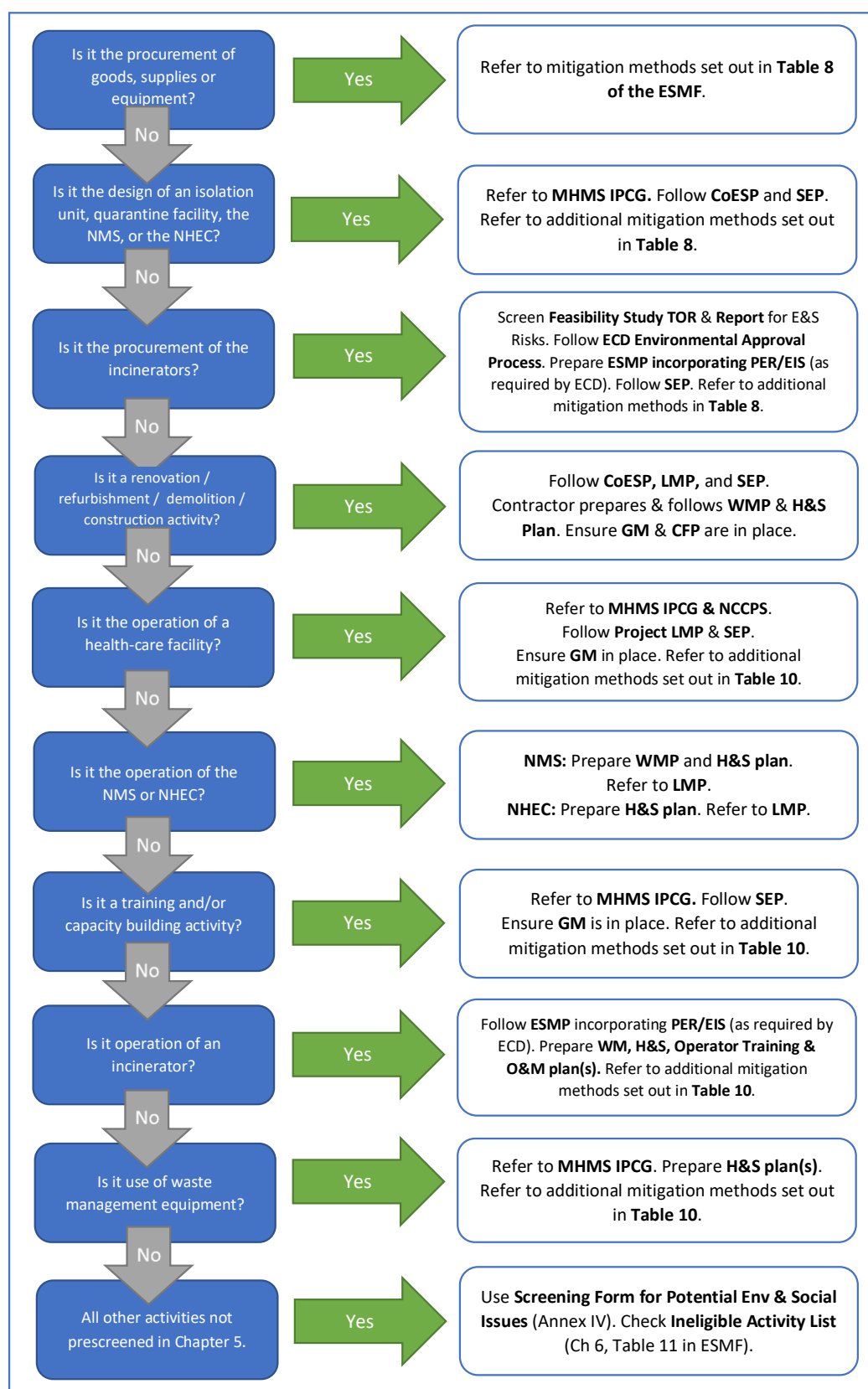


Table 11 - Ineligible Activity List

The following type of activities shall not be eligible for financing under the Project:

- Activities of any type classifiable as “High” risk pursuant to the World Bank's Environment and Social Standard 1 (ESS1) of the Environment and Social Framework (ESF). The following activities are illustrative examples of “High” risk activities. The screening process in Annex IV would identify any additional activities considered “High”:
 - Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) adverse impacts;
 - Activities that have high probability of causing serious adverse effects to human health and/or the environment not related treatment of COVID-19 cases;
 - Activities that may have significant adverse social impacts and may give rise to significant social conflict;
 - Activities that may affect lands or rights of indigenous people or other vulnerable minorities;
 - Activities that may involve permanent resettlement or land acquisition or adverse impacts on cultural heritage;
 - Activities that are considered by the World Bank (a) to have potential to cause significant loss or degradation of critical natural habitats whether directly or indirectly or those that could adversely affect forest and forest health; (b) that could affect sites with archaeological, paleontological, historical, religious, or unique natural values; and (c) that will result in adverse impacts on involuntary taking of land, relocation of households, loss of assets or access to assets that leads to loss of income sources or other means of livelihoods, and interference with households’ use of land and livelihoods; and
 - Use of goods and equipment as considered by the World Bank to meet the following conditions: (a) lands abandoned due to social tension/conflict, or the ownership of the land is disputed or cannot be ascertained; (b) to demolish or remove assets, unless the ownership of the assets can be ascertained, and the owners are consulted; (c) involving forced/conscripted labour, child labour (under the age of 18), or other harmful or exploitative forms of labour; (d) activities that would affect indigenous peoples, unless due consultation and broad support has been documented and confirmed prior to the commencement of the activities; and/or (e) other paramilitary purposes.

6.3 Land Commitment Guide

The project will not finance activities that will require the acquisition of private land, but, may secure tribal land through a “land commitment letter”. However, the likelihood of this being necessary for Project activities is considered very low.

Drawing from previous World Bank projects, if the land is required as part of a subproject proposal, a **“Land Commitment Letter”** must be signed by the relevant parties (e.g. the public or clan that owns the land and the other representatives (clans and traditional leader of the community)). If necessary, a duly completed Land Commitment Letter must accompany a community subproject proposal to be considered for approval. The Land Commitment Letter, used by RDPII (other WB project) in Annex IX, will be used for this project.

The process that would be used to enter into the terms of a Land Commitment Letter is as follows:

- If the land is required for the identified community subproject then the land owner or clan leaders of the community, along with other community leaders as appropriate ⁴(chief, religious leaders, etc.) would organize a meeting with the representatives of the specific clan who have customary ownership of the proposed land;
- The meeting would discuss the proposed subproject with the landowner or landowning clan (in the event the clan had not participated in the community meetings to prioritize the subproject) to share the rationale for the subproject and its proposed siting, and seek the donation of the necessary land by the owning clan;
- At the same time, the land owner or owning clan would also be notified that their agreement to donating their land should be entirely voluntary;
- If the land owner or owning clan agrees, then a Land Commitment Letter will be signed between the clan, the other clans and the leader of the community;
- The signed Land Commitment Letter will be submitted as part of the subproject proposal.

7 Consultation and Stakeholder Engagement

A stand-alone SEP has been developed to describe the project’s program for stakeholder engagement, public information disclosure and consultation.

The SEP outlines the ways in which the project team will communicate with stakeholders and provides a mechanism through which people can raise concerns, provide feedback, or make complaints about the project or any activities related to the project. Engagement with the local population is essential to ensure collaboration between project staff and local communities and to minimize and mitigate environmental and social risks related to the proposed project activities. Culturally appropriate and adapted awareness raising activities are particularly important to sensitize the communities to the importance of improved health service logistics and delivery, information management, implementation and M&E capacity in relation to infectious diseases.

Stakeholder engagement will continue throughout the life of the project and will include formal scheduled consultations and meetings as well other means of communication. The stakeholder engagement process has two components:

- Early and ongoing engagements with key stakeholders at national, sub national and community to provide information on the Project and obtain feedback on experiences and outcomes of the Project and its activities.
- A GM to address any public complaints during the implementation of the Project.

7.1 Project Stakeholders

To ensure effective and targeted engagement, the Project identifies three core stakeholder categories: affected parties; other interested parties; and vulnerable groups.

7.1.1 Affected Parties

Affected Parties comprise persons, groups and other entities within the project area of influence that are directly influenced (actually or potentially) by the project and/or have been identified as most susceptible to change associated with the project, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures.

The following are considered affected parties in the context of this project:

- Ministry of Health and Medical Services (MHMS) officials/staff;
- Healthcare Workers (Doctors, nurses, scientists, educators);
- Health waste management workers;
- National Emergency Operations Committee (including heads of relevant line agencies);
- Government Ministries;
- Provincial Health Divisions;
- Neighbouring communities to the quarantine facility;
- Contractors and workers at construction sites of medical centres/hospitals/NMS facilities;
- People under COVID-19 quarantine or self-isolation;
- Family members of COVID-19 infected people including those under quarantine or self-isolation;
- COVID-19 infected people and their family members; and
- Communities (i.e. religions, gender) of COVID-19 infected people.

7.1.2 Other Interested Parties

Other interested parties include individuals, groups and other entities that may not experience direct impacts from the project but who consider or perceive their interests as being affected by the project and/or who could affect the project and its implementation in some way. These include:

- Traditional media
- Participants of social media
- Politicians
- Other national and international health organizations
- Local and international non-governmental organizations (NGOs)
- Local businesses
- Businesses with international links
- The public at large

7.1.3 Vulnerable Groups

The Project identifies vulnerable groups as any persons or groups who may be disproportionately impacted or further disadvantaged by the project due to their vulnerable status, and who may require special engagement efforts to ensure their equal representation in project consultation and decision-making processes. The project will conduct targeted engagement with vulnerable groups to ensure they are fully informed of the project and to understand their concerns and needs in accessing information, medical facilities and services and other challenges they face at home, at workplaces and in their communities.

Vulnerable groups may include, but are not limited to, the following:

- Elderly
- Illiterate people
- Vulnerable groups working in informal economy
- People with disabilities
- Female-headed households
- Children, especially those who may be malnourished with low immunity
- People with pre-existing medical conditions such as heart or lung disease, diabetes, cancer, HIV/AIDS among others

7.2 Consultation and Information Disclosure

7.2.1 Stakeholder Engagement during Project Preparation

Given the emergency nature of the project and the transmission dynamics of COVID-19, consultations during the project preparation phase and during the development of the ESMF were limited to relevant government officials, health experts, hospital administrators and others from institutions working in health sector.

Any significant changes to the ESMF and SEP will be consulted on and disclosed during the project implementation period.

7.2.2 Consultation and Disclosure during Project Implementation

Consultation will take place throughout the life of the Project, to disclose information to project stakeholders and seek their feedback. Dedicated channels for information dissemination will be established to ensure consistent communication at national and local levels throughout the project. Stakeholder engagement will comprise consultations with stakeholders throughout the entire project cycle to inform them of the project and to solicit their concerns, feedback and complaints about any activities related to the Project and consultations to improve Project design and implementation.

Stakeholders will be kept informed as the project develops, including reporting on project environmental and social performance and implementation of the SEP and the GM.

The project consultation and disclosure programme is summarized in Table 12 below.

Table 12 - Project Consultation and Disclosure

Project Activity and Component	Methods	Target Stakeholders	Information to be disclosed
<p>Renovation and refurbishment activities e.g.:</p> <ul style="list-style-type: none"> Renovation of quarantine facilities in areas bordering Papua New Guinea – subcomponent 1.1 Renovation of isolation units at Good Samaritan and Atoifi hospitals - – subcomponent 1.1 Renovation of ICUs in two Provincial hospitals – subcomponent 2.1 Refurbishment of the national medical storage facility (NMS) by financing refurbishment of the warehouse – subcomponent 2.1 Refurbishment of the existing Zome building to establish a national health emergency coordination center (NHEC) - subcomponent 2.1 Renovation and rehabilitation activities at Tulagi hospital, Helena Goldie hospital, Good Samaritan hospital, Atoifi hospital, Zome - National Surveillance Unit, Wagina Area Health Centre, Taro Area Health Centre - subcomponent 2.1 	<ul style="list-style-type: none"> Internal GOS communication channels including letters/memos/emails and round table meetings. One-on-one meetings with community leaders and representatives. One-on-one meetings with warehouse and hospital management staff and with construction contractor(s) Community and small group meetings with vulnerable groups, where these are safe and culturally appropriate Dissemination of materials (posters, leaflets, brochures) with project information Press releases (for key events and major announcements) Social media updates 	<ul style="list-style-type: none"> Government ministries Warehouse, hospital, and ICU management Warehouse, hospital, and ICU staff Construction contractors and workers Neighbouring communities to the quarantine facilities and proposed location of new NMS Affected communities Disadvantaged /vulnerable groups 	<ul style="list-style-type: none"> Project objectives/ implementation Project design documents Construction activities schedules / work plans and progress reports Community safety measures Project environment and social risk and impact management / ESMF GM's

Subcomponent 1.1 Enhancing case detection, confirmation, and contact tracing capabilities	<ul style="list-style-type: none"> Information and communication materials developed and sent to health care facilities. These materials include guidance on early detection, case confirmation, contact tracing and appropriate use of supplies and consumables. 	<ul style="list-style-type: none"> Provincial Health Divisions Laboratory management Health care workers 	<ul style="list-style-type: none"> Early Covid-19 detection Case confirmation Contact tracing Appropriate use of supplies and consumables. LMP & Worker GM
<p>Capacity building and training activities, eg.:</p> <p>Training of health care workers in hospital infection control, and disease surveillance - Subcomponent 1</p> <p>HR support for vaccine deployment - Subcomponent 1.2</p> <p>Capacity building in two Provincial hospitals (Tulagi and Helena Goldie hospitals) - Subcomponent 2.1</p> <p>Training of staff at the NMS on medical warehouse management - Subcomponent 2.1</p> <p>Training of health care workers in hospital infection control, and disease surveillance, GBV – Subcomponent 2.1</p> <p>Strengthening pharmaceutical systems includes training/assets associated with the refurbished NMS facilities – Subcomponent 2.1</p>	<ul style="list-style-type: none"> Internal MHMS communication channels including letters/memos/emails Letters to provincial governments Carrying out capacity building activities and training in relation to interpersonal communication by health workers related to COVID-19, infection prevention and control, testing, waste management and clinical management of patients with mild symptoms in primary care settings. Information and communication materials developed and sent to health facilities. These materials include guidance for preparedness, appropriate use of personal protective equipment (PPE) and protective measures in health care facilities Using the medical and nursing schools to promote health 	<ul style="list-style-type: none"> MHMS officials/staff Local Government officials Provincial Health Divisions Health institutions management and staff Isolation and testing facility management and staff Health care workers Health waste management workers 	<ul style="list-style-type: none"> Infection prevention and control Covid-19 testing Waste management Clinical management of patients in primary care settings. Use of PPE and protective measures in health care facilities LMP & Worker GM

<p>Surge deployment capacity, including in-house local HR capacity enhancement - Subcomponent 1.1</p> <p>Ongoing support for Local Technical Support and assistance - Subcomponent 1.1</p>	<p>worker contribution to the pandemic</p> <ul style="list-style-type: none"> • Provide capacity building support for communication (through training, mentoring and remote assistance) • Training of Trainers will enable communication focal points to also train others doing the messaging at the community levels • Prevention materials for isolation officers and screeners on infection prevention and control 		
<p>Subcomponent 2.1: Enhancing health-care waste management</p>	<ul style="list-style-type: none"> • Providing information materials and training for health care workers on health care waste management. • Training in procurement, installation and operation of medical waste incinerator(s). 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Health care waste management. • Procurement, installation and operation of medical waste incinerator(s)
<p>Community engagement related activities e.g.;</p> <p>Support for community engagement related to vaccine deployment - Subcomponent 1.2</p> <p>Printing and publication support to meet printing costs of C19 Vax cards and registration forms - Subcomponent 1.2</p>	<ul style="list-style-type: none"> • This component is to provide support for MHMS lead-engagement around vaccine demand generation to take place. The details of the engagement program are yet to be determined but would likely include face-to-face meetings with communities including vulnerable people; and radio, TV and social media notices. 	<ul style="list-style-type: none"> • MHMS • General public including remote communities and vulnerable people • Health care workers • Provincial Health Divisions • Health care facility management and staff 	<ul style="list-style-type: none"> • Vaccine demand generation, e.g., benefits and risks associated with vaccination; vaccine availability; and vaccination process (e.g., timing, locations, eligibility, etc.)

<p>Policy planning and coordination activities e.g.:</p> <p>Implementation of system strengthening - Subcomponent 2.2</p> <p>Support for advocacy and implementation of the new upcoming Public Health Emergency Bill - Subcomponent 2.2</p>	<ul style="list-style-type: none"> • Radio, TV and social media notices. 	<ul style="list-style-type: none"> • MHMS • General public • Health care workers • Local Government officials • Provincial Health Divisions 	<ul style="list-style-type: none"> • Dissemination of information relating to the new upcoming Public Health Emergency Bill
<p>Component 3: Project Implementation Management, Monitoring and Evaluation</p>	<ul style="list-style-type: none"> • Training to improve oversight, coordination, surveillance, and data analysis to support project implementation management, M&E. • Support to M&E framework development, implementation, and reporting. 	<ul style="list-style-type: none"> • MHMS management and personnel • Provincial Health Divisions • Health care facility management and staff 	<ul style="list-style-type: none"> • Data collection, analysis and reporting to support health management, M&E. • Financial management

7.3 Grievance Procedures

7.3.1 Grievance Mechanism

The project GM will seek to resolve complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. It will provide a transparent and credible process for fair, effective and lasting resolution of grievances. It will also build trust and cooperation as an integral component of broader community consultation that facilitates corrective actions.

MHMS will establish and implement the GM within 30 days and update the GM as necessary throughout project implementation. The GM will be coordinated by the ESHS&CE Specialist working under the supervision of the Project Manager. The GM will:

- Provide affected people with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of Projects.
- Ensure that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants.
- Avoid the need to resort to judicial proceedings.

7.4 Monitoring and Reporting

The SEP will be periodically revised and updated as necessary in the course of project implementation in order to ensure that the information presented is consistent and reflects the evolving nature of information required at different stages of the project, and that the identified methods of engagement remain appropriate and effective in relation to the project context and specific phases of the development. Any major changes to project related activities or schedule will be reflected in the SEP. Quarterly summaries and internal reports on public grievances, enquiries and related incidents, together with the status of implementation of associated corrective/preventative actions, will be collated by the designated GM officer (ESH&CE Specialist), and referred to the Project Manager and Project Steering Committee. Quarterly summaries will provide a mechanism for assessing both the number and the nature of complaints and requests for information, along with the project's ability to address those in a timely and effective manner.

8 Implementation Arrangements, Responsibilities and Capacity Building

8.1 Implementing Agency

The MHMS of Solomon Islands will be the project's implementing agency and will have the overall implementation responsibility for the Parent Project and Additional Financing, including the responsibility for carrying out day-to-day management and implementation of the project and coordinating with other government ministries/agencies and stakeholders on all aspects of project implementation as required.

A Project Operational Manual (POM) was developed to support the PMU to meet its responsibilities for management and implementation of the Parent Project. The POM describes detailed arrangements and procedures for the implementation of the project, such as responsibilities of the PMU, operational systems and procedures, project organizational structure, office operations and procedures, finance and accounting procedures (including funds flow and disbursement arrangements), procurement procedures, personal data collection and processing, and implementation arrangements for the ESCP as well as the preparation and/or implementation of instruments referred to in the ESCP, per World Bank ESF guidance. The POM is currently being updated to support the Additional Financing.

The MHMS will prepare and submit regular (six-monthly) monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to, the implementation of the ESCP, status of preparation and implementation of the Project's environmental and social documents, stakeholder engagement activities and grievances log, Labour Management Procedures, contractor's ESHS implementation (when required for the refurbishment of physical facilities), ESHS incidents, and the functioning of the grievance mechanism.

Project Management Unit (PMU)

MHMS has established a Project Management Unit (PMU) under the Parent Project, led by the Undersecretary Administration and Finance (USAF). The PMU, who also be responsible for implementation of the AF, directly report to the Undersecretary Administration and Finance, and is staffed with a core team with expertise in project management, procurement, financial management, environment and social risk management, and M&E. The PMU will be responsible for the day-to-day management of the AF, including financial management, procurement, safeguard preparation, consolidation of work plan and budget, financial audit, ensuring compliance with ESF of the World Bank, and monitoring and evaluation. Individual consultants with specific skill sets will be recruited to provide support to the PMU as needed.

ESHS&CE Specialist

The ESHS&CE Specialist, reporting to the Project Manager, functions as a core member of the PMU under MHMS and will ensure that environmental, social, and health and safety risks are managed in accordance with the requirements of the World Bank's ESF, WHO Guidance on COVID-19, and SIG Law.

The ESHS&CE Specialist's role is to:

- Lead the implementation of the project's ESMF and associated instruments in accordance with the World Bank ESF, project ESCP and SIG legal requirements including:

- Review the feasibility study terms of reference (ToR) and final report for potential E&S risks prior to procurement of the incinerators.
- Develop and deliver ESHS training for the PMU and other relevant stakeholders;
- Managing the oversight of project contractors, including Civil Works Contractors, and review of contractor(s) waste management and health and safety plan(s);
- Environmental and social screening (outlined in section 6), preparation and disclosure of site-specific instruments (ESMP) and ECD consent applications and associated documents (PER/EIS), consultation and information dissemination activities with relevant stakeholders;
- Managing environmental and social risks in procurement;
- Site-based environmental, safety and social monitoring. Address non-compliances and develop and confirm the implementation of corrective actions. Assist with the implementation of project investment opportunities that would improve performance;
- Review incinerator waste management, health and safety, operator capacity building and training and operation and maintenance plans.
- Preparation of the monthly and six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project; and
- Notification, reporting and management of incidents or accidents related to the Project which have, or are likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.
- Oversee the implementation of the project's SEP Plan in close collaboration with the Project Manager.
- Coordinate the implementation of the project's GM ensuring timely resolution of project related grievances.
- Participate in semi-annual Project Supervision missions, representing MHMS on environmental, safety and social aspects.
- Conduct other ESHS and CE related activities as required by the Project Manager.

International ESHS Specialist

The ESHS&CE Specialist will be supported by part-time, international ESHS expert, who shall be recruited/appointed and retained on an as-required basis and report to the Project Manager

Specially the International ESHS Specialist will:

- Provide technical support to the ESHS&CE Specialist to implement the project's ESMF and associated instruments in accordance with the World Bank ESF, ESCP and SIG legal requirements including:
 - Support the ESHS&CE Specialist to review the feasibility study terms of reference (ToR) and final report prior to procurement of the incinerators.
 - Support the ESHS&CE Specialist to develop and deliver ESHS training for the PMU and other relevant stakeholders.
 - Support environmental screening, preparation and disclosure of site-specific instruments, and consultation and information dissemination activities with relevant stakeholders.
 - Support site-based environmental, safety and social monitoring. Advise on suitable corrective actions/opportunities for improving performance.

- Support the ESHS&CE Specialist to review incinerator waste management, health and safety, operator capacity building and training and operation and maintenance plans.
- Support/Review monthly and six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project.
- Support notification, reporting and management of incidents or accidents related to the Project which have, or are likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.
- Participate (remotely) in semi-annual Project Supervision missions, representing MHMS on environmental, safety and social aspects.

8.2 Activity Level Environmental and Social Risk Management Responsibilities

Construction Contractors

Construction contractor's will be used for installation and refurbishment activities such as the installation of the incinerators and refurbishment of health care facilities for isolation and quarantine centres. Contractor(s) will be required to comply with the project's E&S risk management plans and procedures, including the CoESP and LMP, as well as local legislations and this will be specified in the contractor's agreements. Contractor(s) will be expected to disseminate and create awareness within their workforce of environmental and social E&S risk management compliance, and undertake any staff training necessary for their effective implementation. Where contractors do not have existing environmental staff, the E&S Specialists within the PMU, supported by the World Bank Environmental and Social team, will make arrangements for adequate capacity building within the contractor's workforce.

Contractor(s) will also be required to prepare and comply with WMP(s) and health and safety plan(s) in compliance with both the ESMF and local legislation, and submit those plans to the PMU E&S Specialists for approval, prior to the commencement of renovation and/or refurbishment activities and to take all necessary precautions to maintain the health and safety of their personnel. The contractor(s) will 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, to take protective measures to prevent accidents, to ensure suitable arrangements are made for all necessary welfare and hygiene requirements, to undertake worker training, and be a focal point to deal with COVID-19 issues. Contractors will be briefed on the GM and required to refer any grievances to the Social Specialist who will coordinate the GM.

Health-care Facilities

At the health-care facility level, the head of the health-care facility will have overall responsibility for IPC and waste management. During project implementation, the head of the health-care facility should assess the following:

- whether adequate and qualified staff are in place, including those in charge of infection control and waste management;
- whether additional staff are required: if so, how many, and with what qualifications and training;

- how relevant departments in the healthcare facility will work together to create an intra-departmental team to manage, coordinate and regularly review the issues and performance of the facility.

The head of a health-care facility should formally appoint a person or team to be responsible for implementing the procedures and mitigation measures that have been adopted to avoid or minimize the spread of COVID-19. This would be the person/team with overall responsibility for infection prevention control and waste management and would ensure that IPC and health care waste management activities are carried out in accordance with the MHMS IPCG. This person/team would also manage, coordinate and regularly review the performance of the facility in terms of how the waste streams in the health-care facilities are separated, tracked and recorded, and oversee the procedures for the safe transportation of potentially infected samples to testing facilities.

Currently, some health care facilities have a dedicated person/s who champions IPC and health-care waste management⁴⁵ who could also be identified for IPC and health-care waste management oversight for this Project. This will be decided during project implementation.

8.3 World Bank Environmental and Social Team

The Bank's Environmental and Social team will provide regular E&S risk management compliance monitoring and support for the duration of the project, remote and during missions, and to build capacity for ESMF implementation and stakeholder engagement. As international travel may be slow to resume, supervision and missions may continue to be conducted remotely for some time.

8.4 Capacity Building

Whilst MHMS has no prior experience with the World Bank's safeguards policies, the interim PMU staff is very familiar working on projects using these policies. However, this will be the first World Bank-financed project subject to the ESF in Solomon Islands. During an interim period of up to six months, the dedicated Environmental Health and Social Welfare Division staff will take up day-to-day environmental and social risk management of the project activities, supported by the Safeguards Officer of the interim PMU. It is also expected that enhanced oversight from the Bank E&S team will be required.

The incoming PMU E&S Specialists may have differing level of familiarity with the WB ESS's and Procedures and may need ongoing support, training, and technical assistance to implement the Project E&S documents and prepare project activity instruments during project implementation. It is expected that enhanced oversight from the World Bank E&S team will be required and a capacity assessment will identify where training and further capacity building will be needed. Implementation support will include: (a) capacity building for MHMS staff on WB implementation and requirements; (b) an implementation support mission every six months, once international travel has resumed to Solomon Islands; (c) interim technical discussions and site visits by the WB; (d) monitoring and reporting by the implementation team on implementation progress and achievement of results; (e) annual internal and external financial audits and FM reporting; and (f) periodic procurement post review. In the event of the inability of relevant staff to travel to Solomon Islands to undertake implementation support, the use of audio/video conferencing, as has been the case during Project preparation, will continue in order to

⁴⁵ SPREP, 2014. Baseline Study for the Pacific Hazardous Waste Management Project - Healthcare Waste – Solomon Islands

ensure “just in time” support to the MHMS. The WB will also maintain a close dialogue with the PMU E&S Specialists and ensure implementation support for environmental and social risk management and stakeholder engagement when needed. Further capacity assessments during project implementation will identify where training and further capacity building will be needed.

The Solomon Islands health sector has some experience in IPC, health-care waste management, and communication and public awareness for emergency situations through other national health projects. Effective implementation of the environmental and social risk management will require capacity development for those responsible for implementing project activities at grass-root levels.

Extensive training of hospital medical, laboratory and waste management personnel will be envisaged and funded under the project, in addition to investments in waste management equipment (e.g. incinerators and waste management trucks). Training and capacity support of hospital medical, laboratory and waste management personnel is built into to the project design (components 1 and 2). Where other development partners (for example, ADB, DFAT, and other UN agencies) are funding complementary activities, coordinated approaches to the training will be identified and pursued.

E&S related training topics/themes will include:

- Interpersonal communication by health workers related to COVID-19;
- Infection prevention and control;
- Testing;
- Health care waste management;
- Clinical management of patients with mild symptoms in primary care settings; and
- Identification and management of GBV cases.

Training topics/themes delivered by the PMU E&S Specialists will likely cover the following topics:

- The relevant requirements of the ESMF, LMP, SEP, MHMS IPCG, provisions to prevent SEA/SH, and WHO guidelines on COVID-19.
- The roles and responsibilities of key agencies in the E&S risk management implementation.
- Managing COVID related waste, and general medical health care waste.
- Labour management procedures.
- Grievance mechanisms.
- Consultations, communications and feedback.
- Ensuring all peoples are given equal access and rights (vulnerable groups, ethnic groups).
- Understanding concerns with GBV, violence against children, social stigma with COVID 19.
- Monitoring and reporting at all levels.

8.5 E&S Risk Management Budget

ESMF implementation costs are allocated according to the budget line items in Table 13. Such costs include the PMU E&S Specialists and other costs to be determined during project implementation. Costs for undertaking monitoring and trainings as well as participation with World Bank supervision missions are also identified. The anticipated cost for all these initiatives is estimated at \$305,000 USD.

The PMU E&S Specialists, once onboard, will be maintained throughout project implementation. The E&S Specialists in the PMU will not have a standalone, earmarked budget to complete E&S risk

management activities such as the preparation of activity level E&S risk management instruments. Instead the cost is embedded in the PMU E&S Specialists budgets.

Table 13 - ESMF Implementation Costs.

E&S risk management resource	USD
ESHS&CE Officer (PMU) (full-time)	\$47,000
<ul style="list-style-type: none"> • Screening of activities. • Preparation and disclosure of activity level instruments. • Supervision, monitoring, and reporting. • Information and communication • Monitoring including preparation of six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project. • Training and workshops • Coordinating the Project's GM 	
International ESHS Specialist (PMU) (part-time. Approx. 40 days over 2 years)	\$40,000
<ul style="list-style-type: none"> • Support screening of activities. • Support preparation and disclosure of activity level instruments. • Support supervision, monitoring, and reporting. • Support monitoring including preparation of six-monthly monitoring reports on the ESHS performance of the Project. • Support notification, reporting and management of incidents or accidents. • Training and Workshops. • Capacity Building. • Support the coordination of the Project's GM. 	
Training and Communications	\$25,000
<ul style="list-style-type: none"> • PMU E&S specialist/s to travel to provide ESHS training at national and provincial level. • Consultation activities in accordance with the SEP. 	
Supervision, monitoring, and reporting	\$25,000
<ul style="list-style-type: none"> • PMU E&S specialist/s to travel to provinces semi-annually for training and conducting project supervision, monitoring and reporting. 	
TOTAL	\$137,000

9 Annexes

Annex I. Abbreviations and Acronyms

BSL	Biosafety Level
CDC	Centre for Disease Control and Prevention
CFP	Chance Finds Procedure
CoESP	Code of Environmental and Social Practice
COVID-19	Coronavirus Disease 2019
DFAT	Australia's Department of Foreign Affairs and Trade
ECD	Environment Conservation Division
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
E&S	Environmental and Social
ESCP	Environmental and Social Commitment Plant
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health and Safety
ESHS&CE	Environmental, Social, Health, Safety and Community Engagement
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
FTCF	Fast Track COVID-19 Facility
GBV	Gender Based Violence
GIIP	Good International Industry Practice
GM	Grievance Mechanism
GRS	Grievance Redress Service
HCC	Honiara City Council
H&S	Health and Safety
ICU	Intensive Care Unit
IPC	Infection and Prevention Control
IPCG	Infection and Prevention Control Guidelines
LMP	Labour Management Procedures
M&E	Monitoring and Evaluation
MECDM	Ministry of Environment, Climate Change, Disaster Management and Meteorology
MFAT	Ministry of Foreign Affairs and Trade
MHMS	Ministry of Health and Medical Services
NCCPS	National Covax Communication Plan & Strategy
NCD	Non-communicable disease
NCCPS	National Covax Communication Plan & Strategy
NDOC-H	National Disaster Operations Center-Health
NHEOC	National Health Emergency Operations Center
NMS	National Medical Storage Facility
NRH	National Referral Hospital
OHS	Occupational Health and Safety
PDO	Project Development Objective
PER	Public Environment Report
PMU	Project Management Unit
POM	Project Operations Manual
POP	Persistent Organic Pollutants
PPE	Personal Protective Equipment

SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SIG	Solomon Islands Government
SH	Sexual Harassment
SPREP	Secretariat of the Pacific Regional Environment Programme
SPRP	Strategic Preparedness and Response Program
UN	United Nations
UNICEF	United Nations Children’s Fund
WB	World Bank
WHO	World Health Organization
WMP	Waste Management Plan

Annex II. Code of Environmental and Social Practice (CoESP) for Civil Works

This Code of Environmental and Social Practice (CoESP) has been developed to manage the risks associated with the civil works: refurbishment (and in some cases demolition and rebuild) of existing health-care facilities; refurbishment of the National Medical Storage facility (NMS) in Honiara; refurbishment of the existing Zome building to establish a national health emergency coordination center (NHEC); as well as the installation of incinerators as part of the Solomon Islands COVID-19 Emergency Response Project (the Project). All civil works supported under the Project are required to comply with the CoESP and this will be specified in the contractor(s) agreements.

The CoESP provides the guidance for the environmental and social risk management of the civil works during the implementation of the Project. The potential environmental and social impacts, mitigation measures, and responsibilities during the planning and design and renovation/refurbishment/demolition/construction and installation stages are outlined.

This CoESP should be read in conjunction with the MHMS Infection Prevention and Control Guidelines (IPCG) and the following Project documents:

- Environmental and Social Management Framework (ESMF)
- Labour Management Procedure (LMP)
- Stakeholder Engagement Plan (SEP)
- Project Operational Manual (POM)

Monitoring and Compliance

The planning and design stages of the CoESP will be followed by MHMS and compliance monitored by the World Bank E&S Risk Management Team.

The renovation/refurbishment/demolition/construction and installation stages of the CoESP will be followed by the contractor(s) and compliance monitored by the MHMS PMU E&S Specialists.

Reporting

Six-monthly reports will need to be prepared by the PMU E&S Specialists and provided to the World Bank. The semi-annual environmental and social monitoring reports to the World Bank will include: (i) the status of the implementation of mitigation measures; (ii) the findings of monitoring programs; (iii) stakeholder engagement activities; (iv) grievances log; and (v) any incidents/accidents with adverse impacts and the actions taken to address it and prevent reoccurrence.

Incidents/accidents must be reported in accordance with the World Bank Safeguards Incident Response Toolkit' (SIRT). The SIRT outlines the requirements for reporting GBV cases and has a protocol that defines incidents using three categories.

- "Indicative" events are addressed within the Task Team with notification to the Practice Manager and Regional Safeguards Coordinator (RSC).
- "Serious" events need to be elevated by the Task Team Leader (TTL) to the Country Manager/Director, Global Practice Manager, Social and Environmental Practice Managers and Directors, Relevant Program Leaders (RVP), Legal, External and Corporate Relations (ECR), RSC Regional Safeguards Advisor, and Chief Environmental and Social Standards Officer (CESSO).

- In “Severe” events, the TTL promptly notifies the CMU (Country Manager/Country Director (CD)). The CD informs the RVP, SD VP and/or other network VP if appropriate, copying the home GP Practice Manager (PM), Director and Senior Director, RSA, CESSO, E&S PMs and Directors and Senior Directors, LEGEN (with cc to the Country Lawyer), E&S specialists, RSC, and ECR.

During the renovation/refurbishment/demolition/construction/installation stages, monthly reports shall be prepared by the contractor(s) and submitted to the PMU E&S Specialists for review. The reports will include information on: (i) the implementation of Health and Safety and Waste Management plans; (ii) any health and safety or environmental incidents; and (iii) information on any grievances received and how they were resolved.

Planning and Design Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Design of refurbished health-care facilities do not meet layout and engineering requirements for nosocomial infection control, increasing risk of spreading COVID-19 in health facilities.	<ul style="list-style-type: none"> The design set up and management of the facilities will take into account the advice provided by WHO and/or CDC on COVID-19 management and infection control: <ul style="list-style-type: none"> WHO guidance for Severe Acute Respiratory Infections Treatment Centre. WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected; WHO technical brief water, sanitation, hygiene and waste management for COVID-19; WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources); CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings; and CDC guidelines for environmental infection control in healthcare facilities. Hand washing facilities should be provided at the entrances to health care facilities in line with Recommendations to Member States to Improve Hygiene Practices. Isolation rooms should be provided and used at medical facilities for patients with possible or confirmed COVID-19. Refer to the IPCG (Annex VI) for more detail on isolation room requirements. 	Approved engineering designs.	During detail design period – prior to works commencing - once	<p>MHMS and related department at national and provincial levels (implementation)</p> <p>WB E&S Risk Management Team (oversight)</p>

Planning and Design Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Design of waste management facilities are inappropriate, do not allow for the separation of infectious and non-infectious waste increasing the risk of spreading COVID-19.	<p>The following mitigation measures must be undertaken prior to works beginning:</p> <ul style="list-style-type: none"> • Estimate the potential health-care waste streams including sharps and vaccine program wastes; • Consider the capacity of existing facilities, and plan to increase capacity, if necessary, through refurbishment, expansion etc.; • Specify that the design of the facility considers the collection, segregation, transport and treatment of the anticipated volumes and types of health-care wastes; • Require that receptacles for waste should be sized appropriately for the waste volumes generated, and colour coded and labelled according to the types of waste to be deposited; • 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; and • Design of facility will follow guidance from WHO and/or CDC on health-care waste management and infection prevention control and the guidance detailed in the IPCG (Annex VI). 	Approved engineering designs.	During detail design period – prior to works commencing - once	<p>MHMS and related department at national and provincial levels (implementation)</p> <p>WB E&S Risk Management Team (oversight)</p>
Design of refurbished facilities does not consider universal access e.g. women, children, elderly, and users with disabilities.	<ul style="list-style-type: none"> • Consider the need for differentiated access for different users of the facilities in the design. • Undertake consultation meetings in accordance with the Project SEP to identify potential access issues and appropriate mitigation. 	Approved engineering designs; consultation minutes.	During detail design period – prior to works commencing - once	<p>MHMS (implementation)</p> <p>WB E&S Risk Management Team (oversight)</p>

Planning and Design Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Facilities that are not covered by adequate life and fire safety (L&FS) risk assessment and mitigation measures.	L&FS master planning will be included in the design of the refurbished facilities in line with GIIP and national legal requirements. MHMS will ensure that all national legal L&FS requirements are met, upon completion of the installation. The facilities should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression; Smoke Control.	Approved engineering designs with L&FS measures clearly marked.	During detail design period – prior to works commencing - once	MHMS and related department at national and provincial levels (implementation) WB E&S Risk Management Team (oversight)
Facilities to be renovated/refurbished/de demolished may contain asbestos, lead from lead paints, synthetic mineral fibre (SMF), ozone depleting substances (from old air conditioning units) and polychlorinated biphenyls (PCBs).	Building inspection(s) that identifies whether asbestos or other hazardous materials are present prior to renovations/refurbishments commencing.	Hazardous material assessment.	During detail design period – prior to works commencing - once	MHMS (implementation) WB E&S Risk Management Team (oversight)
NMS design does not adequately provide for pharmaceutical or chemical storage and disposal.	Medical Store design should be developed for proper chemical handling, storage and disposal. At a minimum, the following mitigation measures must be undertaken prior to works beginning: <ul style="list-style-type: none"> Estimate the potential amounts of chemicals and chemical wastes to be stored and disposed of at the refurbished Medical Store; Develop a simple waste measurement and tracking system for operation that measures the amount of waste produced and disposed of. This will ensure that waste types and amounts are tracked and recorded to make sure that the Medical Store has defined options for waste disposal at the time of operation commencement. Specify that the design of the Medical Store considers the safe handling, collection, segregation, and storage of the anticipated amounts and 	Approved engineering designs.	During detail design period – prior to works commencing - once	MHMS (implementation) WB E&S Risk Management Team (oversight)

Planning and Design Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<p>types of chemicals and chemical wastes in accordance with the substances material safety data sheet(s) (MSDS(s)), Solomon Islands law, and GIIP such as ISO standards on the handling and storage of chemicals from the ISO 14001 Documentation Toolkit; and</p> <ul style="list-style-type: none"> Consider the capacity of the existing Medical Store, and plan to increase capacity for chemical and chemical waste collection, separation, separation and disposal, if necessary, through the refurbishment. 			
Design and siting of incinerators and ash pit(s) are inappropriate and leads to air, land and/or water pollution.	<p>Design and siting of incinerators and ash pit(s) are to be in accordance with the ESMP, Solomon Islands law, and GIIP.</p> <p>Ash pits are to be located away from water bodies and sensitive receptors.</p>	Approved engineering designs.	During detail design period – prior to installation commencing - once	<p>MHMS (implementation)</p> <p>WB E&S Risk Management Team (oversight)</p>
Inadequate construction workforce size and/or insufficient accommodations.	<p>The following mitigation measures must be undertaken prior to works beginning:</p> <ul style="list-style-type: none"> Identify numbers and types of workers; Identify how long workers will be needed for; Ensure adequate accommodation and implement measures to minimize cross infection; and Use the Project LMP to screen risks and identify further mitigation measures. 	Number and types of workers identified in bidding documents; evidence of risk screening.	During detail design period – prior to works commencing - once	<p>MHMS (implementation)</p> <p>WB E&S Risk Management Team (oversight)</p>

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Air quality, noise, and vibration generated from civil works	<p>The contractor(s) is responsible for compliance with all relevant national legislation and international standards with respect to noise and vibration and ambient air quality.</p> <p><u>Noise and vibration:</u></p> <p>The contractor(s) undertaking works shall implement the following at a minimum:</p> <ul style="list-style-type: none"> • Plan activities in consultation with communities so that noisiest activities are restricted to being undertaken during periods that will result in least disturbance; • Noise levels should be maintained within the national permissible limits/standards; • If necessary, use temporary noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines) and select equipment with lower sound power levels where possible; • Minimize transportation of demolition waste and construction materials through community areas during regular working time; • Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and surrounding areas if possible, to lessen the impact of noise; and • Noise impacts should not exceed 55 dB(A) for residential; institutional, or educational receptors during the daytime (07:00 – 22:00) and 45 dB(A) during the Night-time (22:00 – 07:00) and for industrial or commercial receptors should not exceed 70 dB(A) at anytime or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site. <p><u>Air Quality:</u></p> <p>The contractor(s) undertaking works shall implement dust suppression measures (e.g. covering of material stockpiles, etc.) as required. At a minimum the following is required:</p>	Designated stockpile areas approved; dust plumes; complaints register; vehicle and plant maintenance records.	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage																
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities												
	<ul style="list-style-type: none">Materials used shall be covered and secured properly during transportation to prevent scattering of soil, sand, materials, or generating dust;Keep stockpiles of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals;Minimize dust from exposed work sites and stockpiles by applying water on the ground regularly;No burning of site clearance debris (trees, undergrowth) or construction waste materials;Hydrocarbons shall not be used as a method of dust control;Immediately re-vegetate and/or stabilize exposed areas (if required); andAmbient air quality should not exceed relevant national air quality guidelines/standards or the current WHO Ambient Air Quality Guidelines: <table><tr><th colspan="3">WHO Ambient Air Quality Guidelines</th></tr><tr><th></th><th>Averaging Period</th><th>Guideline value in $\mu\text{g}/\text{m}^3$</th></tr><tr><td>Particulate Matter PM_{10}</td><td>1-year 24-hour</td><td>20 50</td></tr><tr><td>Particulate Matter $\text{PM}_{2.5}$</td><td>1-year 24-hour</td><td>10 25</td></tr></table>	WHO Ambient Air Quality Guidelines				Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$	Particulate Matter PM_{10}	1-year 24-hour	20 50	Particulate Matter $\text{PM}_{2.5}$	1-year 24-hour	10 25			
WHO Ambient Air Quality Guidelines																
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$														
Particulate Matter PM_{10}	1-year 24-hour	20 50														
Particulate Matter $\text{PM}_{2.5}$	1-year 24-hour	10 25														

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Soil erosion and uncontrolled sediment causing negative impacts to surface or groundwater.	<p>The contractor(s) undertaking works shall implement the following at a minimum:</p> <ul style="list-style-type: none"> • Implement suitable project design (e.g., establish appropriate erosion and sediment control measures) to minimize soil erosion and identify and protect receiving water courses and bodies; • Scheduling to avoid heavy rainfall periods; and • Use mulch, grasses or compacted soil to stabilize exposed areas promptly. 	On-site sediment control measures; records of water quality monitoring (visual); revegetation.	Weekly inspections throughout construction period.	<p>Contractor(s) (implementation)</p> <p>PMU E&S Specialists (oversight)</p>
Resource efficiency issues, including materials supply and extraction of raw materials.	<p>The contractor(s) undertaking works shall at a minimum:</p> <ul style="list-style-type: none"> • Estimate the quantities of raw materials needed for the minor civil works; • Source raw materials and construction materials locally and from licenced/permitted facilities only; and • Use recycled or renewable building materials (e.g. timber) where possible. 	Contract for local materials.	Prior to works commencing and then throughout construction as required	<p>Contractor(s) (implementation)</p> <p>PMU E&S Specialists (oversight)</p>
Impacts on local communities from traffic obstruction, congestion, and traffic and road safety.	<p>The contractor(s) undertaking works shall implement the following at a minimum:</p> <ul style="list-style-type: none"> • Construction and establishment of haul roads shall be kept to a minimum; • Communicate traffic management plans – including traffic volumes, schedules, road closures and community safety measures – to project stakeholders and local communities. • Minimise the extent of traffic and construction impacts on adjacent villages and other residential areas where possible; and • All traffic signs used for the warning or direction of traffic at road works sites shall comply with appropriate traffic regulations. Homemade signs shall not be used. • Implement dust suppression measures. 	Traffic management plan included in the Contractor(s) H&S Management Plan; traffic control measures implemented; signage and barriers installed as required; complaints register.	Weekly inspections throughout construction period.	<p>Contractor(s) (implementation)</p> <p>PMU E&S Specialists (oversight)</p>

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
Damage to cultural heritage.	The contractor(s) shall have a Chance-Finds Procedure in place prior to any physical works beginning. Chance Finds Procedure is available in Annex III.	Chance-Finds Procedure in place; complaints register.	Prior to works commencing and then maintained throughout construction.	Contractor(s) Site Engineer (implementation) PMU E&S Specialists (oversight)
Land and/or water pollution from waste generated by demolition debris, construction materials, and/or workers (solid, hazardous, and wastewater)	<p>The contractor(s) undertaking works shall implement the following at a minimum:</p> <ul style="list-style-type: none"> • Develop and follow a site-specific WMP (separation of waste streams, storage, provision of bins, site clean-up, bin clean-out schedule, etc.). The WMP must be developed and submitted to the PMU E&S Specialists for approval prior to any physical works commencing; • The WMP must include the principles of the Waste Hierarchy (Reduce, Reuse, Recycle, Residual Disposal) as outlined in the National Waste Management and Pollution Control Strategy 2017-2026. The following methods for waste reduction and recycling should be utilized: <ul style="list-style-type: none"> ○ Minimise waste production by reusing existing structures; initially remove materials by hand e.g. wooden floorboards, to avoid damage and excess waste; separating materials (metal, timber etc.) and storing them in neat piles to avoid cross contamination; ensuring safe and dry storage of salvaged items; placing clear signage on all waste separation and collection areas; ○ Recyclable materials such as packaging material etc., shall be segregated and collected on-site from other waste sources for reuse or recycle (sale); ○ Remove scrap metal, such as roofing materials and iron rebar from concrete, for reuse off-site or metal recycling where practicable. Steel off-cuts can be recovered and sold as scrap metal; 	Contractor's WMP; sanitation facilities maintained onsite; waste and recycling records; worker training records.	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> ○ Timber can be resold for utilisation as fuel (non-treated) or for repairing houses in villages or outer island communities (treated); ○ On-site and off-site transportation of waste should be conducted to prevent or minimize spills, releases, and exposures to employees and the public; ● Use litter bins, containers and waste collection facilities at all places during works; ● Store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licenced waste collector; ● Dispose of waste only at designated place identified and approved by local authority. Open burning or burial of solid waste on the construction site shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally sensitive areas (including watercourses); ● Provide adequate portable sanitation facilities serving all workers at all construction sites; ● Ensure onsite worker sanitation facilities be properly operated and maintained to collect and dispose of wastewater; ● Minimize hazardous waste generation by ensuring hazardous waste is not co-mingled with non-hazardous waste. Collect, transport and disposal of hazardous waste to licenced/permitted hazardous waste sites only following good international industry practice (GIIP) for the waste being handled; and ● Design training for staff in the segregation of wastes. 			
Land and/or water pollution from use and storage of hazardous substances e.g. minor spills from fuel, oils, lubricants.	<p>The contractor(s) undertaking works shall implement the following at a minimum in accordance with relevant Solomon Islands laws and GIIP such as the JFC EHS Guideline: Hazardous Materials Management:</p> <ul style="list-style-type: none"> ● Using impervious surfaces for refuelling areas and other fluid transfer areas; 	Secured storage areas and secondary containment; spill kit and worker training records; records	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> Ensure that refuelling and maintenance facilities are not located, or that activities do not take place, within 30 m of a watercourse, or in ecologically sensitive areas. If a 30m limit is impracticable then a lesser limit may be adopted provided approval is obtained. On no account shall the limit be less than 10 m; Providing adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids. If the secondary containment used is bunding, then the area should also be lined and covered; Ensure that vehicles and plant are not stored within 30 m of a watercourse, or in ecologically sensitive areas, overnight or when not in use; Regular checks for leaking oil or fuel from machinery undertaken. Any leaks are promptly repaired and/or parts replaced within two days as part of maintenance of vehicles and equipment; Training workers on the correct transfer and handling of fuels and chemicals and the response to spills; and Spill kit, appropriate to the hazardous materials being used, to be kept on-site and workers to be trained in its deployment. 	of safety briefings; vehicle and plant maintenance records.		
Land and/or water pollution from hazardous wastes such as asbestos, lead paints, SMF, ozone depleting substances (from old air conditioning units) and PCBs that may be present in demolition or refurbishment debris.	<p>The contractor(s) undertaking works shall be required to do the following at a minimum:</p> <ul style="list-style-type: none"> Hazardous material management procedure detailed in WMP(s) to be developed during project by the contractor in accordance with GIIP. WMP(s) must be submitted to the PMU E&S Specialists for approval prior to any physical works commencing; Asbestos containing materials managed in accordance with GIIP such as WBG guidelines on asbestos management. GIIP for asbestos includes: i) Requirements for contractors and stipulations of clauses in the tendering documents; ii) Risk assessment – determining the content of asbestos and risks of exposure incurred by workers, to assess them and to take the necessary precautions; iii) Notification to the occupational 	Hazardous material management procedure as part of Contractor's WMP; record of building inspection; hazardous waste records; worker training records.	Procedure prepared prior to works commencing and then weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<p>health and safety authority responsible for the work site; iv) Work plan with working instructions - lay down the technical and personal protective measures to be taken in the work plan; v) Training of project stakeholders and training of contractor and workers; vi) Transport, storage and disposal of asbestos (agreements with component bodies for transportation and disposal);</p> <ul style="list-style-type: none"> • Safe removal of any asbestos-containing materials or other toxic substances shall be performed and disposed of by specially trained workers in line with the WBG guidelines on asbestos management; • Removal personnel will have proper training prior to removal or repair of asbestos containing materials; • All asbestos waste and products containing asbestos is to be buried at an appropriate landfill and not to be tampered or broken down to ensure no fibres are airborne. Disposal of waste containing asbestos should be agreed with ECD; and • No asbestos containing materials shall be used for construction works. 			
Occupational Health and Safety (OHS) risks for workers from civil works.	<p>The contractor(s) undertaking works shall comply with all national and good practice regulations and GIIP regarding workers' safety, such as OHS section of the IFC EHS Guidelines on Construction and Decommissioning, and implement the following at a minimum:</p> <ul style="list-style-type: none"> • Complete different levels of risk assessment, i.e. from whole Job Safety Analysis down to the personal level, to identify any potential hazards, rank the risks, and identify ways to eliminate, control or minimize the hazards. Develop and follow a site-specific health and safety (H&S) management plan that is compliant with the ESMF and World Bank Environment and Health and Safety Guidelines (EHSs). H&S management plan(s) must be submitted to the PMU E&S Specialists for approval prior to any physical works commencing; • 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; 	Contractors Health and Safety plan(s); Emergency Action Plan; workers allocated and wearing PPE; first aid kits in vehicles and at work sites; worker training records; complaints record; accident/incidents register.	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> • Prepare and implement a simple action plan to cope with risk and emergency (e.g., fire, storm surge, cyclone, COVID-19 outbreak); • Have or receive minimum required training on occupational safety regulations and use of PPE; • Undertake training of staff to meet standards for the proper operation and use of equipment; • Training of workers in lifting and materials handling techniques in renovation / refurbishing projects, including the placement of weight limits above which mechanical assists or two-person lifts are necessary; • Training and use of temporary fall prevention devices, such as rails or other barriers able to support a weight of 200 pounds, when working at heights equal or greater than two meters (e.g. on scaffolding); • Use of control zones and safety monitoring systems to warn workers of their proximity to fall hazard zones, as well as securing, marking, and labelling covers for openings in floors, roofs, or walking surfaces; • Take protective measures to prevent accidents such as: <ul style="list-style-type: none"> ○ implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths. ○ Locating electrical cords and ropes in common areas and marked corridors. ○ Planning and segregating the location of vehicle traffic, machine operation, and walking areas, and controlling vehicle traffic through the use of one-way traffic routes, establishment of speed limits, and on-site trained flag-people wearing high-visibility vests or outer clothing covering to direct traffic. ○ Ensuring moving equipment is outfitted with audible back-up alarms. • Use of temporary fall protection measures in scaffolds and out edges of elevated work surfaces, such as handrails and toe boards to prevent materials from being dislodged. 			

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<p>Provide PPE and other safety measures as appropriate during works such as safety glasses with side shields, face shields, hard hats, hi-vis vests and safety shoes with non-slip soles, first aid kits, restricted access zones, warning signs, overhead protection against falling debris;</p> <ul style="list-style-type: none"> Refer any grievances received by the community or local businesses to the local PMU ESHS&CE Specialist who will coordinate the GM; and Provide project workers with accessible means to raise workplace concerns (refer to Project LMP, Annex VII). 			
Issues related to inappropriate worker accommodations such as close working and poor living conditions which may create conditions for the easy transmission of COVID-19 and the infection of large numbers of people.	<p>The contractor(s) undertaking works shall comply with all national and good practice regulations regarding workers' safety and the LMP for the Project and implement the following at a minimum:</p> <ul style="list-style-type: none"> Appoint a senior person, e.g. the health and safety officer, as the focal point to deal with COVID-19 issues; Prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations. 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; All construction facilities should establish hand hygiene programmes. Frequent and proper hand washing is one of the most important measures that can be used to prevent infection by the COVID-19 virus. Wash stations should be provided regularly throughout site, with a supply of clean water, liquid soap and paper towels (for hand drying), with a closed waste bin (for used paper towels) that is regularly emptied. Wash stations should be provided wherever there is a toilet, canteen/food and drinking water, sleeping accommodations, at waste stations, at the entry/exit of the site, and other communal facilities. Where wash stations cannot be provided, alcohol-based hand rub should be provided. Undertake regular cleaning of the construction site and accommodation with neutral detergent and water. 	Hand hygiene stations; cleaning records; COVID-19 plan; worker training records; complaints records; accidents/incidents register.	Weekly inspections throughout construction period.	<p>Contractor(s) (implementation)</p> <p>PMU E&S Specialists (oversight)</p>

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> Worker accommodation that meets or exceeds IFC/EBRD worker accommodation requirements (e.g. in terms of floor type, proximity/no of workers, no 'hot bedding', drinking water, washing, bathroom facilities etc.). Accommodation maintained in clean and hygienic condition to minimize spread of infection; If a worker is diagnosed with COVID-19, follow the Consolidated National Preparedness and Response Plan for COVID-19; and Undertaking health awareness and education initiatives with construction workers e.g. providing information on COVID-19 symptoms, transition paths, good hand hygiene, physical distancing etc. 			
Workers do not receive the care needed if infected with COVID-19.	Contractors should ensure that contracted workers have medical insurance, covering treatment of COVID-19.	Medical Insurance Records.	Prior to works commencing and then monitored throughout construction as required.	Contractor(s) (implementation) PMU E&S Specialists (oversight)
Health and safety risks for community, health care workers, patients and their relatives from civil works.	<p>The contractor(s) undertaking works shall implement the following at a minimum:</p> <ul style="list-style-type: none"> Develop and follow a site-specific health and safety (H&S) management plan that is compliant with the ESMF and World Bank Environment and Health and Safety Guidelines (EHSGs) and which includes health and safety measures for the community. H&S management plan(s) must be submitted to the PMU E&S Specialists for approval prior to any physical works commencing; A Traffic Management Plan must be included in the H&S Management Plan; Comply with all national and good practice regulations regarding workers' safety and the Project's LMP; 	Contractor's Health and Safety plan which includes a Traffic Management Plan; signage and traffic control measures; site barriers such as fencing; records of consultations; complaints	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> Take protective measures to prevent accidents such as: <ul style="list-style-type: none"> Barriers to prevent unauthorised access to worksites. Implementing good house-keeping practices to eliminate the hazard where possible, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths. Planning and segregating the location of vehicle traffic, machine operation, and walking areas, and controlling vehicle traffic through the use of one-way traffic routes, establishment of speed limits, and on-site trained flag-people wearing high-visibility vests or outer clothing covering to direct traffic. Ensuring moving equipment is outfitted with audible back-up alarms. Provide safe access routes and other safety measures as appropriate during works such first aid kits, restricted access zones, warning signs, covering openings to small confined spaces, overhead protection against falling debris and barricaded exclusion areas for drop zones (e.g. when working at heights), lighting system to protect community against construction risks; Deliver and store oxygen in accordance with WHO advice Oxygen sources and distribution for COVID-19 treatment centres, if relevant; Communicate risks and community safety mitigation measures to project stakeholders and communities; and Grievance mechanism (GM) developed and operational in accordance with the Project SEP. 	records; accident/incidents register.		
Increase in sexual exploitation and abuse/harassment (SEA/H) related to project workforce	<p>The Contractor(s) should at a minimum:</p> <ul style="list-style-type: none"> Comply with all relevant national laws and legislations. 	Contractor's Health and Safety Management plan which includes SEA/H	Weekly inspections throughout construction period.	Contractor(s) (implementation)

Renovation / Refurbishment / Installation Stage				
Risks and Impacts	Mitigation Measures	Monitoring - Verification	Monitoring - Frequency	Responsibilities
	<ul style="list-style-type: none"> Include SEA/H requirements in the site-specific H&S management plan including aspects relating to preventing GBV and SEA/H and zero tolerance for these behaviours. Ensure that workers are well briefed on the GBV and SEA/H requirements in the H&S management plan. Provide separate facilities for female and male workers. Refer to the Project LMP for further mitigation measures. 	requirements; Agreed Code of Ethics and Professional Conduct; worker training records; complaints record.		PMU E&S Specialists (oversight)
Workers are underaged.	Child labour or forced labour is absolutely prohibited in the project.	Records of workers by age; complaints record.	Weekly inspections throughout construction period.	Contractor(s) (implementation) PMU E&S Specialists (oversight)

Annex III. Chance Finds Procedure

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national or global level. Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water. Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith— that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

The list of negative activity attributes which would make an activity ineligible for support includes any activity that would adversely impact cultural heritage assets. In the event that during minor civil works sites of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents.

Chance find procedures will be used as follows:

- (a) Stop the earthworks, construction or land clearing activities in the area of the chance find;
- (b) Delineate the discovered site or area;
- (c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the relevant Ministry take over;
- (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the relevant Ministry immediately;
- (e) Responsible local authorities and the relevant Ministry would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures;
- (f) Decisions on how to handle the finding shall be taken by the responsible authorities and the relevant Ministry;
- (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the relevant Ministry; and
- (h) Construction work could resume only after permission is given from the responsible local authorities and the relevant Ministry concerning safeguard of the heritage.

These procedures must be referred to as standard provisions in construction contracts. During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed.

Relevant findings will be recorded in World Bank Supervision Reports and Implementation Completion Reports will assess the overall effectiveness of the project's cultural heritage mitigation, management, and activities.

Annex IV. Screening Form for Potential Environmental and Social Issues

This form is to be used by the PMU E&S Specialists to for screen potential environmental and social risks and impacts of a proposed project activity not pre-screened in Chapter 5 of the ESMF e.g. for additional financing activities. The purpose of screening is to (i) determine whether activities are eligible to be financed, and likely to have potential negative environmental and social risks and impacts; and (ii) identify appropriate mitigation measures for activities with adverse risks or impacts. The screening will help the PMU E&S Specialists in identifying the relevant Environmental and Social Standards (ESS), establishing an appropriate E&S risk rating for these activities and specifying the type of environmental and social assessment required, including specific instruments/plans.

This form is for all ‘other’ activities not already pre-screened in Chapter 5 the ESMF e.g. additional financing activities such as vaccine procurement. Before screening, also check that the activity is not listed in Ineligible Activity List (Chapter 6, Table 11 in the ESMF).

Use of this form will allow the PMU E&S Specialists to form an initial view of the potential risks and impacts of a project activity. ***It is not a substitute for project-specific E&S assessments or specific mitigation plans.***

The completed forms will be signed and kept in the Project ESF file and included in the ESF implementation progress report to be submitted to World Bank (WB) per the schedule as agreed with WB.

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

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	no		
Does the activity involve civil works including new construction, expansion, upgrading or rehabilitation of health-care facilities and/or waste management facilities? Could climate change or extreme weather adversely impact the project?			ESS1	Activity ESIA/ESMP. (new construction), CoESP (civil works), Construction/Renovation H&S and WMP, Project LMP, SEP & GM
Does the activity involve land acquisition and/or restrictions on land use?			ESS5	If yes, this activity is ineligible for project financing
Does the activity involve acquisition of assets for quarantine, isolation or medical treatment purposes?			ESS5	If yes, this activity is ineligible for project financing
Is the activity associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for health-care waste disposal?			ESS3	Activity ESMP, MHMS IPCG, Project SEP, GM & LMP
Is there a sound regulatory framework and institutional capacity in place for health-care facility infection control and health-care waste management?			ESS1	Activity ESMP, MHMS IPCG, Project SEP & GM
Does the activity have an adequate system in place (capacity, processes and management) to address waste?				MHMS IPCG and/or activity WMP, Project SEP & GM
Does the activity involve recruitment of workers including direct, contracted, primary supply, and/or community workers?			ESS2	Project LMP, SEP & GM

Does the activity have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?				Activity H&S Plan. Project LMP
Does the activity have a GM in place, to which all workers have access, designed to respond quickly and effectively?				Project GM
Does the activity involve transboundary transportation (including Potentially infected specimens may be transported from health-care facilities to testing laboratories, and transboundary) of specimen, samples, infectious and hazardous materials?			ESS3	Activity IPC&WMP, Project SEP & GM. Transport should be performed in accordance with WHO interim guidelines on specimen collection and shipment
Does the activity involve use of security or military personnel during construction and/or operation of health-care facilities and related activities?			ESS4	Follow WB Technical Note: Use of Military Forces to Assist in Covid-19 Operations Suggestions on how to Mitigate Risks. Project SEP & GM
Is the activity located within or in the vicinity of any ecologically sensitive areas?			ESS6	If yes, this activity is ineligible for project financing
Are there any indigenous groups (meeting specified ESS7 criteria) present in the activity area and are they likely to be affected by the proposed activity negatively or positively?			ESS7	SEP incorporating provisions for IPs
Is the activity located within or in the vicinity of any known cultural heritage sites?			ESS8	If yes, this activity is ineligible for project financing
Does the activity area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	Project LMP, SEP & GM
Does the subproject carry risk that disadvantaged and vulnerable groups may have inequitable access to project benefits?			ESS1	Activity ESIA/ESMP, Project SEP & GM

Is there any territorial dispute between two or more countries in the activity and its ancillary aspects and related activities?			<i>OP7.60 Projects in Disputed Areas</i>	If yes, this activity is ineligible for project financing
Does the subproject carry risk that disadvantaged and vulnerable groups may have unequitable access to project benefits?			ESS1	ESIA/ESMP, SEP
Will the activity and any related activities involve the use or potential pollution of, or be located in international waterways ⁴⁶ ?			<i>OP7.50 Projects on International Waterways</i>	If yes, this activity is ineligible for project financing
Will the activity be classified as “High” risk pursuant to the World Bank's Environment and Social Standard 1 (ESS1) of the Environment and Social Framework (ESF) and based on this screening process?			ESS1	If yes, this activity is ineligible for project financing

Conclusions:

1. Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low). Provide Justifications.

2. E&S Management Plans/ Instruments to follow.

Remarks.....
.....

Sign by: Activities owner:

Position:Date

⁴⁶ International waterways include any river, canal, lake or similar body of water that forms a boundary between, or any river or surface water that flows through two or more states.

Sign by:

Position:**Date:**.....

Annex V. Environmental and Social Management Plan (ESMP) Template

An Environmental and social management plan (ESMP) is an instrument that details (i) the measures to be taken during the implementation and operation of an activity to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (ii) the actions needed to implement these measures.

The PMU E&S Specialists may need to develop an Environmental and Social Management Plan (ESMP) for the incinerators, and / or proposed project activities not pre-screened in Chapter 5 of the ESMF e.g. for additional financing activities such as vaccine deployment, setting out how the environmental and social risks and impacts will be managed through the project lifecycle.

Any ESMP prepared for Project activities should be prepared with regards to the MHMS Infection Prevention Control Guidelines (IPCG) and the following project documents:

- Environmental and Social Management Framework (ESMF)
- Labour Management Procedure (LMP)
- Stakeholder Engagement Plan (SEP)
- Project Operational Manual (POM)

If a PER/EIS are determined during project implementation to be required by ECD for the incinerator(s), the requirements of the PER/EIS can be incorporated into the ESMP to be prepared in accordance with the ESF.

This ESMP template, taken from the World Bank ESMF template for COVID-19 response, includes several matrices identifying key risks and setting out suggested E&S mitigation measures. If required, the PMU E&S Specialists can use these 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 PMU E&S Specialists may incorporate relevant sections of the ESMF and supporting documents into the ESMP, with necessary updates.

The matrices illustrate the importance of considering lifecycle management of E&S risks, including during the different phases of the project: 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 World Bank financed healthcare sector projects. The PMU E&S Specialists should review and add to them during the environmental and social assessment of a project activity.

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 PMU E&S Specialists 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 ESMP should be incorporated into the contractors bidding document(s) and/or contract(s).

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

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring: Verification & Frequency	Responsibilities	Timeline	Budget
Identify the type, location and scale of healthcare facilities (HCF) or facilities to be used for deployment of vaccines, including whether the operations of the facilities could be adversely impacted by climate change or extreme weather						
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, including sharps and vaccine program wastes ➤ Consider the capacity of existing facilities, and plan to increase capacity, if necessary, through construction, expansion etc. 				

		<ul style="list-style-type: none"> ➤ 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, vaccines, specimen, reagent, and hazardous materials		Transport should be performed in accordance with WHO interim guidelines on specimen collection and shipment				
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 Project LMP to identify possible mitigation measures 				
Identify needs for using security personnel during construction and/or operation of HCF		Follow WB Technical Note: Use of Military Forces to Assist in Covid-19 Operations Suggestions on how to Mitigate Risks & SEP				

HCF design – general	<ul style="list-style-type: none"> - Structural life and fire 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 Severe Acute Respiratory Infections Treatment Center. ➤ Hand washing facilities should be provided at the entrances to health care facilities in line with WHO Recommendations to Member States to Improve Hygiene Practices. ➤ 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); 				

		<ul style="list-style-type: none"> ✓ 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; ✓ have an ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment. 				
Design to consider mortuary arrangements	Insufficient capacity Spread of infection	<ul style="list-style-type: none"> ➤ Include adequate mortuary arrangements in the design ➤ See WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19) 				
Identify the needs for an effective communication campaign on vaccination, including tailored outreach to different groups (including disadvantaged and vulnerable groups), with different partners						
Assess the capacity of the Borrower to establish effective vaccine cold chain	Failure to store and handle vaccines properly can reduce vaccine potency,	<ul style="list-style-type: none"> ➤ Support the Borrower to design and establish or improve vaccine cold chain temperature monitoring plan. 				

temperature monitoring	resulting in inadequate immune responses in patients and poor protection against disease	See WHO guidance on temperature monitoring ⁴⁷ and CDC Vaccine storage and Handling toolkit ⁴⁸				
Assess the capacity of the Borrower to monitor adverse events following immunization (AEFI) in line with WHO guidelines	Insufficient capacity for ensuring immunization safety through detecting, reporting, investigating and responding to AEFI.	➤ Support the Borrower to design and establish or improve surveillance system of AEFI. See WHO Global manual of surveillance of adverse events following immunization ⁴⁹ .				

⁴⁷ https://apps.who.int/iris/bitstream/handle/10665/183583/WHO_IVB_15.04_eng.pdf;jsessionid=9F079AFFA760DBD35C08B13930268B01?sequence=1

⁴⁸ <https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html>

⁴⁹ https://www.who.int/vaccine_safety/publications/Global_Manual_revised_12102015.pdf?ua=1

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

Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring: Verification & Frequency	Responsibilities	Timeline	Budget
Clearing of vegetation and trees; Construction activities near ecologically sensitive areas/spots	- Impacts on natural habitats, ecological resources and biodiversity					
General construction activities Foundation excavation; borehole digging	- Impacts on soils and groundwater; - Geological risks					
General construction activities	- Resource efficiency issues, including raw materials, water and energy use; - Materials supply					
General construction activities – general pollution management	- Construction solid waste; - Construction wastewater; - Noise; - Vibration; - Dust; - Air emissions from construction equipment					
General construction activities – hazardous waste management	- Fuel, oils, lubricant					
General construction	- Workers coming from infected areas	- Refer to Project LMP. - Consider ways to minimize/control movement				

activities – Labor issues	<ul style="list-style-type: none"> - Co-workers becoming infected - Workers introducing infection into community/general public 	<p>in and out of construction areas/site.</p> <ul style="list-style-type: none"> - 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 area/site or require self-reporting prior to or on entering - 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 				
---------------------------	---	--	--	--	--	--

		<p>infected person from entering the construction area/site for 14 days</p> <ul style="list-style-type: none"> - 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 (Note: no private land acquisition is allowed under the project. In case there is a need for tribal land there is an option of Land Commitment letter).					
General construction activities	GBV/SEA issues	Follow LMP				
General construction	Cultural heritage	Chance-finds procedure (Annex III)				

activities – cultural heritage						
General construction activities – emergency preparedness and response		Emergency Response Plan				
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 E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring: Verification & Frequency	Responsibilities	Timeline	Budget
General HCF operation – Environment	General wastes, wastewater and air emissions	Activity WMP				
General HCF operation – OHS issues	<ul style="list-style-type: none"> - Physical hazards; - Electrical and explosive hazards; - Life and Fire safety, and extreme weather; - Chemical use; - Ergonomic hazard; - Radioactive hazard 	Activity OHS Plan				
HCF operation – Labor issue		Project LMP				
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. 				

		<ul style="list-style-type: none"> 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 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). 				
HCF operation - Infection control and waste management plan		Refer to MHMS IPCG				
Mass vaccination program involving deployment of vaccines from many facilities (not just HCF), vehicles and locations	<p>Mass vaccination provides a vector for the spread of disease</p> <p>Vaccination causes adverse reaction in some individuals</p>	<p>Develop infection control and waste management plan for vaccination program to consider the use of non-HCF for deployment</p> <p>Screen patients for contraindications prior to administration of vaccine</p>				
Waste minimization, reuse and recycling	Use of incinerators results in emission of dioxins, furans and particulate matter	➤ Manage waste in accordance the waste hierarchy (Reduce, Reuse, Recycle, Residual Disposal).				

		<ul style="list-style-type: none"> ➤ 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. 				
Procurement, delivery and set up of equipment for the storage and handling of vaccines and associated medical equipment	Surfaces of imported materials may be contaminated and handling and processing may result in spread of COVID-19.	<p>Technical specifications for procuring equipment should require good hygiene practices in line with WHO technical guidance to be observed when preparing the procured goods.</p> <p>Check national and WHO technical guidance for latest information regarding transmission of COVID on packaging prior to finalization of working protocols at facilities receiving procured goods and update working methods as necessary.</p>				
Transport of goods or supplies, including the delivery, storage and handling of vaccine, specimen, samples, reagents,	COVID-19 is spread by drivers during the transport and distribution of goods or supplies.	Good hygiene and cleaning protocols should be applied. During the transport, truck drivers should be required to wash hands frequently and /or be provided				

pharmaceuticals and medical supplies	Traffic accidents occur during transportation of goods	with hand sanitizer, and taught how to use it. Measures to minimize impacts during transportation, including hazardous materials can be found in the EHSGs.				
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 vaccine, specimen, samples, reagents, medical equipment, and infectious or hazardous materials		Transport should be performed in accordance with WHO interim guidelines on specimen collection and shipment				

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 WHO Infection Prevention and Control for the safe management of a dead body in the context of COVID-19) ➤ Use mortuaries and body bags, together with appropriate safeguards during funerals (see WHO Practical considerations and recommendations for religious leaders and faith-based communities in the context of COVID-19) 				

Vaccination campaign - considerations for communication and outreach for disadvantaged and vulnerable groups						
Stakeholder engagement – considerations for simple, accurate, accessible and culturally appropriate information dissemination; combating misinformation; responding to grievances		Project SEP				
Targeting of beneficiaries is not done in a fair, equitable and inclusive manner	Lack of transparency about the vaccination program	Outreach/communication tools to make potential beneficiaries aware of the eligibility criteria, principles and methods used for targeting Grievance Mechanism				
	Poorest / most needy households are left out	See above. Clear, transparent and unambiguous eligibility criteria Use good quality Government data combined with geographical targeting Use local community structures to identify and select beneficiaries, based on inclusive consultations				
	Lack of diversity and inclusion in vaccination	Ensure women participate in the program and, where possible,				

	<p>program, resulting in inadequate benefits for other vulnerable groups</p>	<p>give preference to women within households as transferees</p> <p>Work with community representatives/NGOs so that vulnerable groups such as unaccompanied children, youth, Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) survivors, Indigenous Peoples, LGBTI communities, refugees, internally displaced peoples etc. are included in project activities and benefits</p>				
	<p>SEA/SH increase in project area (e.g. requests for sexual favors to receive vaccinations)</p>	<p>Consultations to discuss process for identifying vaccination prioritization</p> <p>Grievance Mechanism (GM) to be established as soon as possible to handle complaints</p> <p>Provide information to potential beneficiaries on eligibility criteria and GM process via various media (radio, SMS, television, online, posters)</p> <p>Work with local NGOs to provide social services for affected beneficiaries, as well as assistance to register</p>				

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

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring – Verification & Frequency	Responsibilities	Timeline	Budget
Decommissioning of interim HCF						
Decommissioning of medical equipment						
Regular decommissioning						
<i>To be expanded</i>						

Annex VI. MHMS Infection Prevention and Control Guidelines (IPCG)

Annex VII. Labour Management Procedure (LMP)

Annex VIII. 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 Centre](#), 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 travellers 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 centres](#), 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 labour 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

CDC GUIDANCE

- [Vaccine Storage and Handling Toolkit-November 2020 \(cdc.gov\)](#) (COVID Annex)
- [Healthcare Professions: preparing for COVID-19 Vaccination](#)

Annex IX. Land Commitment Template

Provincial MAL Officer -----

Provincial MAL Coordinator/E&S Consultant -----

Province -----

Dear Sir/Madam,

Re: LAND AVAILABILITY FOR THE PROJECT

This letter serves to confirm our commitment that land is available for the project. This land is given for the use of the _____.

The owners of the land in our community are Mr/Mrs. _____

_____ who with a second family/tribal member confirm our commitment by putting their hand hereto;

This piece of land (_____) is confirmed to be free from the dispute and the Project Committee and subsequent committees appointed by the village to administrate the infrastructure are free to use the said land to provide/improve/expand the provision of the services directly provided by the infrastructure. The landowners fully agree that this commitment is irrevocable.

1. Resource owner (Name) 2. Resource owner representative

2. Signature

3. Date

4. Verified by Project Chairman and Secretary

Chairman

Secretary

Annex X. Terms of References for E&S Specialists in MHMS

TERMS OF REFERENCE

Environmental, Social, Health, Safety, and Community Engagement Specialist

Solomon Islands COVID-19 Emergency Response Project

A. 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 of February, 2021, global confirmed cases have surpassed 112 million, and there have been over 2.4 million deaths.

Solomon Islands was one of 12 countries with no confirmed COVID-19 case until October, 2020. As of February 25, 2021, the total confirmed COVID-19 cases have increased to 18 with no deaths recorded. All international flights were stopped on March 22, 2020. With the limited number of flights between May 26 and September 29, 2020, a total of 1,159 passengers (899 nationals and 260 foreign national) have traveled back to Solomon Islands on 18 flights. While borders are currently closed between Papua New Guinea and Solomon Islands, Papua New Guinea has recorded a total of 1,139 cases and 11 deaths as of February 25, 2021, and there is a risk that COVID-19 could potentially cross to Solomon Islands through some of the northern island groups.

The Solomon Islands has prepared the Consolidated National Preparedness and Response Plan for COVID-19 (issued on March 12, 2020) and an updated Phase 2 plan issued on August 27, 2020. The Solomon Islands Government (SIG) declared a public health state of emergency on March 26, 2020. This allowed the SIG to enforce a number of emergency measures and procedures stipulated under its Emergency Act. In early March, Ministry of Health and Medical Services (MHMS) developed a COVID-19 preparedness and response plan (PRP) with support from DFAT, with estimated cost of SBD 20 million (~US\$ 2.42 million) largely for PPEs and Consumables.

The Solomon Islands COVID-19 Emergency Response Project aims to assist the Solomon Islands in its efforts to prevent, detect and respond to the threat posed by COVID-19 and to strengthen national systems for public health preparedness.

The Project will be implemented by the MHMS, who will recruit a Project Management Unit (PMU) under the leadership of the Deputy Secretary Corporate (DSC). An Environmental, Social, Health, Safety and Community Engagement Specialist (ESHS&CE Specialist) is required to work within the PMU, to support the implementation of the key ESF instruments and lead environmental, social, health and safety and community engagement activities during project implementation.

B. Project Description

The Solomon Islands Covid-19 Emergency Response Project will be comprised of the following components:

- **Component 1. Emergency COVID-19 Preparedness and Response:** Carrying out activities to assist the SIG to prevent, prepare for and respond to COVID-19 including: (a) improving infection prevention and control measures by providing personal protective equipment and necessary supplies and consumables; (b) enhancing case detection, confirmation and contact tracing capabilities; (c) upgrading quarantine facilities and isolation units; and (d) mobilizing contractual health care workers as may be required to respond to a surge in demand for health care services and general operating capacity.
- **Component 2. Health System Strengthening:** Carrying out activities to strengthen the Recipient's health care system by enhancing clinical care capacity to manage COVID-19 cases and sustain routine health service delivery, including: (a) renovations and upgrades to intensive care units in two provincial hospitals; (b) enhancing health care waste management by financing energy efficient incinerators, waste disposal transportation, and training in health care waste management; (c) upgrading of the national medical storage facility by financing refurbishment of its warehouse and training of its staff; (d) supporting MHMS with establishing of a national health emergency coordination center through upgrading and repurposing of the existing building currently used as temporary accommodation for health care workers; and (e) training of health care workers in hospital infection prevention and control.
- **Component 3. Implementation Management and Monitoring and Evaluation:** Providing technical and operational assistance to the Recipient on Project management and implementation, including supporting monitoring and evaluation activities, capacity building of MHMS staff and establishing and supporting the PMU.

C. Environmental and Social Requirements

The project will be implemented in accordance with World Bank Environmental and Social Framework (ESF) and Solomon Islands law. The ESF outlines ten environmental and social standards (ESSs) including i) Assessment and management of environmental and social risks and impacts; ii) Labor and working conditions; iii) Resource efficiency and pollution prevention and management; iv) Community health and safety; v) Land acquisition, restrictions on land use and involuntary resettlement; vi) Biodiversity conservation and sustainable management of living natural resources; vii) Indigenous peoples; viii) Cultural heritage; ix) Financial intermediaries; and x) Stakeholder engagement.

The Environmental and Social Review Summary (ESRS) completed by the World Bank during project preparation, outlines the relevant ESSs for the project including key risks and management measures.

The project is developed to support Solomon Islands to respond to the COVID-19 pandemic and to strengthen its health system for public health emergency, which is thus expected to result in long-term positive environmental and social impacts. However, project activities also present substantial environmental, social, health and safety risks for the project workforce and communities. The primary risks identified include: (i) Occupational, Health and Safety (OHS) management of healthcare workforce, including laboratory technicians; (ii) environmental pollution and community health and safety issues related to the handling, transportation and disposal of healthcare waste; (iii) lack of capacity and

experience of the project implementation agency on the World Bank's policy requirements for environmental and social risk management; (iv) real or perceived inequities to the delivery of services; and (v) potential for sexual exploitation and abuse/sexual harassment (SEA/SH) in quarantine/isolation facilities.

The Environmental and Social Commitment Plan (ESCP) completed by the SIG and endorsed by the World Bank sets out the material measures and actions to ensure the project is implemented in accordance with the relevant ESS requirements.

As per this plan, MHMS has committed to recruiting a full time ESHS&CE Specialist and a part-time International ESHS Specialist within six months of project effectiveness, and preparing, disclosing and adopting the following documents within 30 days of project effectiveness:

- Environmental and Social Management Framework;
- Code of Environmental (and Social) Practice for minor works (CoESP);
- Labor Management Procedures (LMP);
- Updated MHMS Infection Prevention and Control Guidelines (IPCG);
- Updated Stakeholder Engagement Plan (SEP); and
- Grievance Mechanism (GM)

D. Scope of Work

The ESHS&CE Specialist, reporting to the Project Manager, will function as a core member of the PMU under MHMS and will ensure that environmental, social, and health and safety risks are managed in accordance with the requirements of the World Bank's ESF, WHO Guidance on COVID-19, and SIG Law.

Specifically, throughout project implementation the ESHS&CE Specialist will:

- Lead the implementation of the project's ESMF and associated instruments in accordance with the World Bank ESF, project ESCP and SIG legal requirements including:
 - Review the feasibility study terms of reference (ToR) and final report for potential E&S risks prior to procurement of the incinerators;
 - Develop and deliver ESHS training for the PMU and other relevant stakeholders;
 - Managing the oversight of project contractors, including Civil Works Contractors, and review of contractor(s) waste management and health and safety plan(s);
 - Environmental and social screening, preparation and disclosure of site-specific instruments (ESMP) and ECD consent applications and associated documents (PER/EIS), consultation and information dissemination activities with relevant stakeholders;
 - Managing environmental and social risks in procurement;
 - Site-based environmental, safety and social monitoring. Address non-compliances and develop and confirm the implementation of corrective actions. Assist with the implementation of project investment opportunities that would improve performance;
 - Review incinerator waste management, health and safety, operator capacity building and training and operation and maintenance plans.

- Preparation of the monthly and six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project; and
 - Notification, reporting and management of incidents or accidents related to the Project which have, or are likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.
- Oversee the implementation of the project's SEP Plan in close collaboration with the Project Manager.
- Coordinate the implementation of the project's GM ensuring timely resolution of project related grievances.
- Participate in semi-annual Project Supervision missions, representing MHMS on environmental, safety and social aspects.
- Conduct other ESHS and CE related activities as required by the Project Manager.

E. Time Inputs and Key deliverables

The ESHS&CE Specialist position is full time. Key deliverables include:

- Support the international ESHS Specialist to review the screening checklists and relevant ESF instruments.
- Review the action plan for the GM and completion of outputs as per this plan.
- Support the international ESHS Specialist to develop the ESHS training package and delivery of trainings.
- Activity/sub-project E&S screening and preparation of relevant instruments.
- Site-based E&S monitoring reports.
- 6-monthly monitoring reports and incident reports (as required).
- Participation in semi-annual Project Supervision missions

F. Required Expertise

The ESHS&CE Specialist shall have the following core competencies:

- Hold a relevant graduate degree in an environmental, social, public health, communications or related discipline.
- Have a minimum of five years' experience and a strong track record in ESHS assessment and management and in community consultation.
- Strong organizational, analytical and implementation skills.
- Fluent in spoken and written English and Pijin.
- Have strong ability to present clear, concise, accurate and structured reports.

G. References

- Solomon Islands COVID-19 Emergency Response Project preparation documents including the PAD, ESRS, and ESCP

- WHO Coronavirus Disease (COVID-19) Dashboard – see <https://covid19.who.int/>
- WHO COVID 19 Country and Technical Guidance – see <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

TERMS OF REFERENCE

INTERNATIONAL ENVIRONMENTAL, SOCIAL AND HEALTH and SAFETY SPECIALIST

Solomon Islands COVID-19 Emergency Response Project

A. 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 of February, 2021, global confirmed cases have surpassed 112 million, and there have been over 2.4 million deaths.

Solomon Islands was one of 12 countries with no confirmed COVID-19 case until October, 2020. As of February 25, 2021, the total confirmed COVID-19 cases have increased to 18 with no deaths recorded. All international flights were stopped on March 22, 2020. With the limited number of flights between May 26 and September 29, 2020, a total of 1,159 passengers (899 nationals and 260 foreign national) have traveled back to Solomon Islands on 18 flights. While borders are currently closed between Papua New Guinea and Solomon Islands, Papua New Guinea has recorded a total of 1,139 cases and 11 deaths as of February 25, 2021, and there is a risk that COVID-19 could potentially cross to Solomon Islands through some of the northern island groups.

The Solomon Islands has prepared the Consolidated National Preparedness and Response Plan for COVID-19 (issued on March 12, 2020) and an updated Phase 2 plan issued on August 27, 2020. The Solomon Islands Government (SIG) declared a public health state of emergency on March 26, 2020. This allowed the SIG to enforce a number of emergency measures and procedures stipulated under its Emergency Act. In early March, Ministry of Health and Medical Services (MHMS) developed a COVID-19 preparedness and response plan (PRP) with support from DFAT, with estimated cost of SBD 20 million (~US\$ 2.42 million) largely for PPEs and Consumables.

The Solomon Islands COVID-19 Emergency Response Project aims to assist the Solomon Islands in its efforts to prevent, detect and respond to the threat posed by COVID-19 and to strengthen national systems for public health preparedness.

The Project will be implemented by the MHMS, who will recruit a Project Management Unit (PMU) under the leadership of the Deputy Secretary Corporate (DSC). An International Environmental, Social, and Health and Safety (ESHS) Specialist is required to support the MHMS to assist with the implementation of ESF instruments required under the World Bank Environment and Social Framework (ESF). Given the current travel restrictions, the Specialist will not be required to visit Solomon Islands.

B. Project Description

The Solomon Islands Covid-19 Emergency Response Project will be comprised of the following components:

- **Component 1. Emergency COVID-19 Preparedness and Response:** Carrying out activities to assist the SIG to prevent, prepare for and respond to COVID-19 including: (a) improving infection prevention and control measures by providing personal protective equipment and necessary supplies and consumables; (b) enhancing case detection, confirmation and contact tracing capabilities; (c) upgrading quarantine facilities and isolation units; and (d) mobilizing contractual health care workers as may be required to respond to a surge in demand for health care services and general operating capacity.
- **Component 2. Health System Strengthening:** Carrying out activities to strengthen the Recipient's health care system by enhancing clinical care capacity to manage COVID-19 cases and sustain routine health service delivery, including: (a) renovations and upgrades to intensive care units in two provincial hospitals; (b) enhancing health care waste management by financing energy efficient incinerators, waste disposal transportation, and training in health care waste management; (c) upgrading of the national medical storage facility by financing refurbishment of its warehouse and training of its staff; (d) supporting MHMS with establishing of a national health emergency coordination center through upgrading and repurposing of the existing building currently used as temporary accommodation for health care workers; and (e) training of health care workers in hospital infection prevention and control.
- **Component 3. Implementation Management and Monitoring and Evaluation:** Providing technical and operational assistance to the Recipient on Project management and implementation, including supporting monitoring and evaluation activities, capacity building of MHMS staff and establishing and supporting the PMU.

C. Environmental and Social Requirements

The project will be implemented in accordance with World Bank Environmental and Social Framework (ESF) and Solomon Islands law. The ESF outlines ten environmental and social standards (ESSs) including i) Assessment and management of environmental and social risks and impacts; ii) Labor and working conditions; iii) Resource efficiency and pollution prevention and management; iv) Community health and safety; v) Land acquisition, restrictions on land use and involuntary resettlement; vi) Biodiversity conservation and sustainable management of living natural resources; vii) Indigenous peoples; viii) Cultural heritage; ix) Financial intermediaries; and x) Stakeholder engagement.

The Environmental and Social Review Summary (ESRS) completed by the World Bank during project preparation, outlines the relevant ESSs for the project including key risks and management measures.

The project is developed to support Solomon Islands to respond to the COVID-19 pandemic and to strengthen its health system for public health emergency, which is thus expected to result in long-term positive environmental and social impacts. However, project activities also present substantial environmental, social, health and safety risks for the project workforce and communities. The primary risks identified include: (i) Occupational, Health and Safety (OHS) management of healthcare workforce, including laboratory technicians; (ii) environmental pollution and community health and safety issues related to the handling, transportation and disposal of healthcare waste; (iii) lack of capacity and experience of the project implementation agency on the World Bank's policy requirements for environmental and social risk management; (iv) real or perceived inequities to the delivery of services;

and (v) potential for sexual exploitation and abuse/sexual harassment (SEA/SH) in quarantine/isolation facilities.

The Environmental and Social Commitment Plan (ESCP) completed by the SIG and endorsed by the World Bank sets out the material measures and actions to ensure the project is implemented in accordance with the relevant ESS requirements.

As per this plan, MHMS has committed to recruiting a full time ESHS&CE Specialist and a part-time International ESHS Specialist within six months of project effectiveness, and preparing, disclosing and adopting the following documents within 30 days of project effectiveness:

- Environmental and Social Management Framework;
- Code of Environmental (and Social) Practice for minor works (CoESP);
- Labor Management Procedures (LMP);
- Updated MHMS Infection Prevention and Control Guidelines (IPCG);
- Updated Stakeholder Engagement Plan (SEP); and
- Grievance Mechanism (GM).

D. Scope of Work

The International ESHS Specialist, reporting to the Project Manager and collaborating closely with the ESHS&CE Specialist, will support the implementation of environmental and occupational health and safety instruments that are compliant with local legislation, good international industry practice (GIIP), including WHO Guidance on COVID-19 and the World Bank ESF.

Specially, throughout implementation the International ESHS Specialist will:

- Provide technical support to the ESHS&CE Specialist to implement the project's ESMF and associated instruments in accordance with the World Bank ESF, ESCP and SIG legal requirements including:
 - Support the ESHS&CE Specialist to review the feasibility study terms of reference (ToR) and final report prior to procurement of the incinerators.
 - Support the ESHS&CE Specialist to develop and deliver ESHS training for the PMU and other relevant stakeholders.
 - Support environmental screening, preparation and disclosure of site-specific instruments, and consultation and information dissemination activities with relevant stakeholders.
 - Support site-based environmental, safety and social monitoring. Advise on suitable corrective actions/opportunities for improving performance.
 - Support the ESHS&CE Specialist to review incinerator Waste Management, Health and Safety, Operator capacity building and training and Operation and maintenance plans.
 - Support/Review monthly and six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project.
 - Support notification, reporting and management of incidents or accidents related to the Project which have, or are likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.

- Participate (remotely) in semi-annual Project Supervision missions, representing MHMS on environmental, safety and social aspects.

E. Time Inputs and Key Deliverables

The International ESHS Specialist will be contracted for 40 days per year to support ongoing ESHS risk management including the following deliverables:

- ESHS training package and delivery (remote).
- Technical review of screening checklists and relevant ESF instruments.
- Technical review and inputs for monthly and 6-monthly monitoring reports and incident reports.
- Participation in semi-annual Project Supervision missions (remote).

F. Required Experience

The consultant is required to have the following skills and qualifications:

- Qualifications and a minimum of 10 years work experience relating to safeguards implementation, ideally for health projects with a particular focus on disease control and waste management;
- Experience in developing countries (ideally Solomon Islands or similar context) and teaching/capacity building experience in cross-cultural contexts;
- Demonstrated experience in the development and implementation of safeguards instruments; and
- Experience working with the WB, WHO or other development agencies.

G. References

- Solomon Islands COVID-19 Emergency Response Project preparation documents including the PAD, ESRS, and ESCP
- WHO Coronavirus Disease (COVID-19) Dashboard – see <https://covid19.who.int/>
- WHO COVID 19 Country and Technical Guidance – see <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>