

INDEPENDENT STATE OF SAMOA

MINISTRY OF HEALTH

Samoa COVID-19 Emergency Response Project

World Bank: P173920

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

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1 Background

The Government of Samoa has secured funding from the World Bank through the Fast Track COVID-19 Facility (FTCF) for the Samoa COVID-19 Emergency Response Project (the Project). The Project is prepared under the global framework of the World Bank COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA).

The Project will be implemented from May 2020 to June 2023, with the purpose of addressing some of the immediate needs of emergency response to COVID-19, as well as to strengthen the health systems and building essential institutional capacities to prepare Samoa for future public health threats. The Project components and activities are designed to fill the critical gaps and support priorities identified in the draft *National Epidemic and Pandemic Influenza Preparedness and Response Plan FY2020/21 to FY2024/25*.

The Project will complement the support committed by other development partners to aid Samoa's response to the COVID-19 pandemic, including WHO, UNICEF, Government of Australia, People's Republic of China, Government of Japan, ADB and the Government of New Zealand.

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

This Environmental and Social Management Framework (ESMF) sets out the principles and procedures for the assessment and management of environmental and social risks and impacts associated with the Project. The ESMF template for COVID-19 Response, developed by the World Bank, 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 and design 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 this ESMF is to guide the Implementing Agency (IA) – the Ministry of Health (MOH) – and activity proponents on the environmental and social screening and subsequent assessment of sub-project activities during implementation, in accordance with the World Bank Environmental and Social Framework. It also provides an assessment of the E&S risks and management of proposed known activities.

The scope of this ESMF includes procedures relevant to the development of all activities including how to conduct screening of 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 Infection Prevention Control and Waste Management Plan (IPC&WMP), Labor Management Procedures (LMP), Stakeholder Engagement Plan (SEP), relevant Covid-19 WHO guidelines, and other specific plans that have been or will be prepared for the Project. This ESMF will allow the Government of Samoa 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 Environmental and Social Framework.

2 Project Description

2.1 Project Subcomponents

The Project components and sub-components are:

Component 1: Strengthening Emergency Response for COVID-19

The aim of this component is to strengthen the readiness and emergency response of health care services and communities to meet the surge in demand in anticipation of a COVID-19 outbreak in Samoa. The support will focus on filling the gaps in the capacity of health facilities to perform early detection, provide diagnostic testing, deliver critical medical services and to cope with increased demand for medical services, including provision of laboratory and medical equipment, medicines and medical supplies. The component will have two sub-components.

Sub-Component 1.1: Health system strengthening for case detection, management and treatment

This sub-component will support the health service system and communities with supplies and in time training to enhance lab testing in two hospitals for the emergency response, case detection, case tracing and case management. To avoid duplication, the supplies to be provided will focus on laboratory equipment, testing kits, cartridges, portable x-ray machine for early detection and essential PPEs as needed. One additional GeneXpert machine will be provided to the lab in the main hospital in Apia. The urgently needed GeneXpert machine COVID-19 cartridge will be procured for the two testing labs in Upolu and Savai'i. Collaborating with UN agencies (WHO, UNICEF) and following the WHO guidelines, training will be provided on engaging community in case tracing, isolation, social distancing as well as on capacity building for health professionals on case management. This sub-component will finance the following activities:

- a) Enhancement of laboratory capacity for disease detection (equipment, testing kits, cartridge and training)
- b) Enhancement of risk communication and community engagement
- c) Provision of PPEs and essential medical equipment for case treatment
- d) Capacity building and training of health workers on detection, isolation and treatment guidelines

Sub-Component 1.2: Infection prevention and control

This sub-component will focus on infection prevention and control, which is critical for preventing the spread of any infectious diseases. Immediate support will be provided to enhance infection control in both health facilities and isolation facilities. An incinerator and trucks to transport medical wastes will be procured and provided to Savai'i. This sub-component will finance the following activities:

- a) Public and Health facility infection prevention and control activities and training
- b) Provision of a health care waste management facility, equipment and goods
- c) Health care waste management training and capacity building

Component 2: Systems Strengthening for Pandemic Preparedness and Response

This component will focus on medium-and long-term capacity building after the emergency stage to improve the prevention, preparedness, and response capacity of Samoa in the context of human and

animal health system development. The component will finance the priorities of Samoa's preparedness system, as identified by the government. Considering the funding envelope, this component will focus on two priorities: enhancing the surveillance system and establishing the public health laboratory. Both are critical for infectious disease prevention, detection and control. In addition, a comprehensive external assessment will also be conducted under this component to enable a systematic institutional strengthening of Samoa's pandemic preparedness. This component includes three sub-components:

Sub-Component 2.1: Strengthening of the surveillance system and training of public health surveillance personnel for case detection, outbreak investigation, contact tracing and monitoring

This sub-component will contribute to strengthening the disease surveillance system and epidemiological capacity of the country for early detection and confirmation of cases; detection of new cases with active contact tracing; strengthening of risk assessment and provide on-time data and information to guide decision-making and response and mitigation activities. Government will develop a proposal with action plan to enhance the disease surveillance system. This sub-component will finance technical assistance and capacity building needed to support the actions in enhancing the disease surveillance system.

Sub-Component 2.2: Establishment of public health laboratory for human and animal health

This sub-component will strengthen Samoa's diagnostic capacity for testing COVID-19 and other infectious diseases. Testing is critical and essential for early detection, diagnoses, contact tracing and case management for infectious diseases control. In the absence of the testing capacity in the country, any samples collected have to be sent to New Zealand for testing. The delay of the test results is a bottleneck for early detection, contact tracing, and spread control. This sub-component will aim to address this bottleneck through providing support to establish a public health laboratory (for both human health and animal health) and to finance the needed civil works, procurement of essential laboratory equipment, reagents, consumables and supplies. Protocols and biosafety regulations will be developed following WHO standards. In addition, human resource development including training and capacity building for laboratory staff will also be financed. It is anticipated that any construction involved under this component will be conducted within the MOH premises, and no new land acquisition or involuntary resettlement are expected.

Sub-Component 2.3: Conduct Joint External Evaluation (JEE) for International Health Regulations (IHR) (2005) to identify gaps and build Samoa's pandemic preparedness

This sub-component will support the government of Samoa to conduct a JEE, a collaborative, multisectoral process to assess country capacity to prevent, detect and rapidly respond to public health risks. The purpose of the external evaluation is to assess country-specific status, progress in achieving the targets under the IHR, and recommend priority actions to be taken across the technical areas being evaluated. The JEE will be implemented through joint efforts of government and development partners, such as WHO, FAO, the WBG, DFAT and NZ-MFAT, with WHO and FAO providing technical support. This will help to bring in international expertise and ensure government's efforts are aligned with global good practice. This sub-component will finance capacity building and technical assistance needed to support the implementation of priority actions identified following the JEE.

Component 3: Implementation Management and Monitoring and Evaluation

This component will finance activities related to project implementation management and monitoring, and evaluation. The proposed project will rely on the existing governance framework of the country to manage project implementation and draw on the expertise of the Centralized Technical Support Services Unit (CTSSU) in the Ministry of Finance (MOF), which was established to provide technical support to World Bank, financed projects in Samoa. Implementing the proposed Project will require administrative and technical capacities that exceed the current capacity of the MOH, so contracting consultants will be financed if needed. Key activities include: (a) operating expenses for project management, reporting and supervision; (b) recruitment of project management personnel and technical consultants; (c) support for procurement, financial management (FM), environmental and social sustainability; (d) learning and knowledge exchange; and (e) monitoring and evaluation.

2.2 Summary of Key Project Subcomponent Activities

The main project activities include:

- Construction of a medical laboratory facility
- Construction of a medical waste management facility and installation of prefabricated medical waste incinerator
- Procurement of goods and supplies including test-kits, chemical disinfectants, PPE and laboratory consumables
- Procurement of a prefabricated waste incinerator and two medical waste transportation trucks
- Procurement of medical equipment including portable x-ray machine, GeneXpert machine
- Training and capacity development activities for MOH Staff and health care workers for operation of the new medical waste incinerators, medical waste collection and storage, and occupational health and safety measures within the new laboratory facility.
- Technical Assistance for training, capacity building, risk communication and community engagement plan activities.
- Technical assistance to support the implementation of priority actions identified in the Joint External Evaluation for International Health Regulations.

2.3 Other World Bank Programming in the Samoa Health Sector

The Project commitment is part of a wider package of World Bank support to tackle a number of Samoa's most pressing health challenges.

In particular, the Samoa Health Systems Strengthening Program – Program for Results, approved in December 2019, will support a subset of the government's National NCD Policy and Action Plan 2019-2023 over a 5-year period (March 2020-December 2025) with the focus on scaling up the essential interventions of NCD control at the primary health care and community setting. The Program Development Objective (PDO) is to improve the quality and efficiency of NCD prevention and control in Samoa.

3 Policy, Legal and Regulatory Framework

The ESMF is designed to comply with the relevant laws, regulations and policies of the Government of Samoa and with the World Bank's environmental and social standards. These laws, regulation and policies are discussed below.

3.1 Relevant Samoan Legislation, Regulations and Policies

Several Samoan legal and statutory documents need to be considered in relation to the Project.

3.1.1 Environmental Assessment and Management

The *Lands, Survey and Environment Act 1989* provides the basis for environmental protection and management in Samoa. It adopts an approach designed to avoid adversely affecting the beneficial uses of the environment from pollution, and the improper management of wastes.

The *Planning and Urban Management Act 2004* (PUM Act) establishes a framework for planning the use, development, management and protection of land in Samoa in the present and long-term interests of all Samoans and for related interests. The PUM Act is the primary environmental legislation in Samoa.

Part V Section 37 of the PUM Act 2004 requires consent for development within Samoa (a Development Consent). The process for determining whether a Development Consent is required and the application process are detailed in the *Planning and Urban Management (Environmental Impact Assessment) Regulations 2007*. Section 37 states that all development that takes place in Samoa needs consent unless a sustainable management plan or regulations provides otherwise. It specifies that a development shall not be carried out unless development consent has been obtained or unless the development is carried out in accordance with the consent.

Under the *Planning and Urban Management (Environmental Impact Assessment) Regulations 2007*, environmental assessments are required for any public or private development proposal that triggers qualifying criteria. The qualifying criteria relate to potential negative impacts on people, property, places, habitats and a range of situations detailed in the regulations, including:

- Adverse impacts on people, an existing activity, building or land
- Adverse impacts on a place, species or habitat of environmental (including social and cultural) importance
- Adverse impacts in conjunction with natural hazard risks
- Adverse impacts on or in the coastal zone
- Adverse impacts on or in any waterway or aquifer
- Adverse impacts arising from the discharge of any contaminant or environmental pollutant
- Adverse impacts associated with land instability, coastal inundation or flooding
- Adverse impacts on the landscape or amenity of an area
- Adverse impacts on public infrastructure
- Adverse impacts on traffic or transportation
- Any other matter for consideration stated in s46 of the Act.

Depending on the nature and scope of the development, either a Preliminary Environmental Assessment Report (PEAR) or a Comprehensive Environmental Assessment Report (CEAR) is required for a development that meets the qualifying criteria. The PEAR is required where the PUMA does not

consider that significant adverse impacts on the environment are likely, and a CEAR where adverse impacts are likely to be significant.

Once completed, the PEAR / CEAR is submitted with a Development Consent Application (DCA) including final design drawings, a site plan, certified survey plans, written consent from property owners, lease agreements, deeds of conveyance and a fee, to the PUMA to be reviewed.

The PEAR and CEAR are open for public comment before a final recommendation is made to the PUM Board. Projects with significant adverse impacts and projects with a value of SAT\$1 million or more must publish a public notice. A 28-day public notification period applies. The Board has representation of various ministries and public communities and can therefore act independently of MNRE. The Board may approve the application, decline it or approve it with conditions. Once development consent for buildings and infrastructure is granted, a building permit from the Ministry of Works, Transport and Infrastructure (MWTI) is required.

For this project, it is likely the following would be required:

- a) Building permit in accordance with national requirements (PUMA) for national laboratory
- b) Development Consent under EIA Regulation 2007 as per National Samoan Environmental legislation for incinerator and national laboratory

3.1.2 Samoa Codes of Environmental Practices

A series of Codes of Environmental Practice (COEPs) have been developed by the Government of Samoa which provide the standards for avoiding or mitigating adverse environmental impacts associated with development project planning, design, construction and maintenance. The COEPs support the EIA Regulation and define methods and / or procedures that provide guidance for planners, designers and contractors. COEP 1, COEP 11 and COEP 12 apply to the design and construction of project activities.

COEP 3: Consultation

COEP 3 requires that consultation is applied to the planning of all activities, and must satisfy the following basic principles:

- At the earliest opportunity, project stakeholders should be advised of potential projects and how the community can receive information about, and become involved with, such projects.
- The intentions/objectives of the consultation should be clear and openly stated.
- Stakeholders and affected communities should have timely and meaningful inputs to, and participation in, any phases or aspects of projects that directly affect them and all inputs should be treated equitably and with respect.
- Consultation should be a two-way process and there should be an exchange of information where both the proponent and the affected communities should put forward their points of view and to consider other perspectives.
- Consultation is best undertaken at early stages in and throughout the decision-making process or at least on-going communication after a decision has been made.
- All parties do not have to agree to a proposal, however through consultation at least points of difference will become clearer or more specific.

3.1.3 Occupational Safety and Health

The *Occupational Safety and Health Act 2002* (OHS Act) aims to enhance productivity, morale and welfare of people at work and of people affected by work activity. Other objectives are to secure the safety, health and welfare of employees; protect persons at or near place of work and protect the environment from risk to safety arising out of activities of employees at work; and foster a co-operative consultative relationship between government, employers and employees on health, safety and welfare of employees at work.

The most relevant parts of the OHS Act are Sections 14 and 15, which say:

- An employer must take all reasonably practicable steps to protect the safety, health and welfare at work of employees and to provide and maintain a safe and healthy working environment including substances, systems of work and any building or public or private area in which work takes place.
- Requirements for safety are mainly the wearing of protecting clothing and equipment to avoid injury and damage to health.
- OSH requirements will be integrated into ESMPs and will be binding on construction contractors.

The *Health Ordinance Act 1959* consolidates certain laws pertaining to public health defining functions and powers to enable officials to protect public health. These functions entail the role of the MoH in carrying out its duties that focuses on buildings/dwellings, nuisances, infectious diseases and other related matters. In particular, health care waste is a matter of public health importance as well as environmental protection.

There are certain requirements pertaining to health care waste (separation, collection, and disposal) that need to be adhered to, and the MoH has a statutory responsibility to ensure that there are suitable appliances for the disposal of health care waste in a manner that is safe and not dangerous to public health.

The GoS encourages a multi-sectoral approach involving relevant government ministries and agencies to work in partnership to obtain the objective of its relevant laws; in particular working in collaboration with the Ministry of Natural Resources and Environment (MNRE) in the development of the health care waste management plan.

3.1.4 Waste Management

The *Waste Management Act 2010* covers the collection, management, disposal, and recycling of waste as well as providing for registration and licensing of waste operators, permits for dumping and incinerating wastes, sets environmental standards for the management of waste, and provides for community involvement in waste management. For health care waste management, which is identified as hazardous waste, it has broad powers to regulate and audit generation, transport and disposal.

Under the Act, the MOH is an “approved waste management operator” and has a number of associated responsibilities including the provision of appropriate waste treatment, storage and disposal facilities; the promotion of recycling and the implementation of measures to minimise wastes having particular adverse implications for human health and the environment.

It further requires the MOH to conduct monitoring and reporting on the effects of wastes on human health and the environment. This includes the preparation, adoption and enforcement of rules, operating manuals, codes of practice and standards relating to the facilities provided by or under the control of the operator and the formulation and implementation of policies, programs and initiatives aimed to reduce the generation of wastes.

Under Section 9 of the Act, the Ministry Natural Resources and Environment has licensed the solid waste landfill at Tafaigata in Upolu and the solid waste landfill at Vai'aata in Savaii.

The *National Healthcare Waste Management Strategy 2020-2025* was prepared by the Ministry of Health and applies to all institutions/facilities generating healthcare waste in Samoa. It supersedes the *National Healthcare Waste Management Plan 2013*.

The health care waste management plan is intended to serve as the regulatory basis for health care waste management for all hospitals and health care facilities in Samoa.

The overarching aims of the plan are:

- To protect human health by reducing exposure of employees, patients, visitors and communities in Samoa to hazardous healthcare waste
- To protect the environment from hazardous waste generated in healthcare facilities
- To ensure regulatory compliance and avoid long-term liability.

Healthcare institution administrators, doctors, dentists, nurses, technicians, sanitation personnel, and other healthcare professionals implement the guidelines during the course of their daily activities.

3.1.5 Ministry of Health Complaints and Grievance Policy 2015

The *Ministry of Health Complaints and Grievance Policy 2015* provides a 'uniform mechanism for managing, facilitating and providing a fair and robust system for clients/patients complaints on health care and services provided by any health care provider'. The service is confidential. The Policy includes:

- Relevant objectives
- Describes the legislative framework and legal mandate for addressing grievances
- Outlines patient rights and roles and responsibilities for making
- Receiving and addressing grievances
- Describes the complaint handling process including classification as minor (easily resolved)
- Moderate (requires investigation)
- Major (significant issues or denial of rights) and acute (serious adverse event)
- Resolution and feedback
- Review/appeal mechanisms.

The process is endorsed by cabinet. A compilation report on grievances is prepared every 6 months for management review and action where required.

3.2 Applicable World Bank Environmental and Social Standards

The Project's environmental risk is classified as 'Substantial' and social risk as 'Moderate'. Six of the ten Environmental and Social Standards (ESSs) of the WB's Environmental and Social Framework (ESF) have been screened as relevant (refer Table 3-1). The screening of social risks and impacts is based on

discussion with the task team and consultations with MOH. An Environmental and Social Commitment Plan (ESCP) for the Project, outlining material measures and actions, has been finalized and forms part of the Project's Financing Agreement.

Table 3-1 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>Maintain the Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division with qualified staff and resources to support management of ESHS risks and impacts of the Project including the Project Manager and Principal Health Care Waste Officer. The HSCRM will be supported by the International Environmental and Social Specialist within the Central Technical Services and Support Unit (CTSSU), Ministry of Finance. Part time consultants may be hired and retained to support management of ESHS risks and impacts of the Project.</p> <p>Prepare an Environmental and Social Management Framework (ESMF) within 30 days of project effectiveness</p> <p>Prepare, disclose, adopt, and implement any environmental and social management plans or other instruments required for activities based on the assessment process in accordance with the ESSs, the ESMF, the ESHGs, and other relevant Good International Industry Practice (GIIP).</p> <p>Incorporate the relevant aspects ESHS measures, into the ESHS specifications of the procurement documents and contracts with contractors and supervising firms and thereafter ensure that the contractors and supervising firms comply with the ESHS specifications of their respective contracts.</p>
ESS2 Labor and Working Conditions	<p>Implement the Project in accordance with the applicable requirements of ESS2 in a manner acceptable to the Association. This includes implementing adequate occupational health and safety measures (emergency preparedness and response measures), setting out grievance arrangements for Project workers, and incorporating labor requirements into the ESHS specifications of the procurement documents and contracts with contractors and supervising firms.</p> <p>Outline these requirements in the ESMF and Labor Management Procedures.</p>
ESS3 Resource Efficiency and Pollution Prevention and Management	<p>Relevant aspects of this standard shall be considered, as needed, ESMF, activity instruments and procurement documents, including, inter alia, measures to manage health care wastes and other types of hazardous and non-hazardous wastes, management of chemicals,</p>

Environmental & Social Standard	Required Measures and Actions
	Outline these requirements in an Infectious Prevention Control and Waste Management Plan (IPC&WMP).
ESS4 Community Health and Safety	Relevant aspects of this standard shall be considered, as needed, in the ESMF, activity instruments and procurement documents. This includes measures to minimise the potential for community exposure to communicable diseases; ensure that individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable, have access to the development benefits resulting from the Project; manage the risks of the use of security personnel; manage the risks of labor influx; and prevent and respond to sexual exploitation and abuse, and sexual harassment, caused by Project activities.
ESS10 Stakeholder Engagement and Information Disclosure	<p>Stakeholder Engagement Plan (SEP) including a Grievance Mechanism shall be updated, disclosed and adopted no later than 30 days after the Effective Date, and implemented throughout the Project implementation period.</p> <p>Grievance Mechanism shall be made publicly available to receive and facilitate resolution of concerns and grievances in relation to the Project, consistent with ESS10, in a manner acceptable to the Association.</p>

3.2.1 World Bank Group Environmental, Health and Safety Guidelines

The following World Bank Environmental, health and Safety Guidelines (EHS Guidelines) are relevant to the Project and have been used to guide the development of the IPC&WMP and LMP:

- General EHS Guidelines: Community Health and Safety. Section 3.6 - Disease Prevention.
- General EHS Guidelines: Occupational Health and Safety.
- General EHS Guidelines: Waste Management.
- Environmental, Health, And Safety Guidelines Health Care Facilities.

3.2.2 World Bank Response to COVID-19.

During the past 2-3 months, in response to COVID-19 outbreak, the World Bank Group has developed a guideline for the preparation of a Contingency Plan for Project Sites and a Technical Note on Public Consultations and Stakeholder Engagement to be applied to projects under implementation and those under preparation. 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 Good International Industry Practice

Relevant Good International Industry Practice (GIIP) such as WHO technical guidance developed for addressing COVID-19. These technical guidance documents are evolving, and they are being updated as new information becomes available.

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.

Additional guidance is listed in Annex X.

4 Environmental and Social Baselines

4.1 Country Overview

Samoa is a small Polynesian island state located in the South Pacific with an estimated population of 197,097 people in 2019. The population is spread among the two main (Upolu and Savai'i) and two smaller islands (Apolima and Manono).

Administratively, the country is divided into 11 districts with approximately 362 villages. The traditional governance and socio-economic system (Fa'amatai) is central to Samoan culture.

4.2 Socio-Economic Baseline

4.2.1 Economy

Samoa's economic development opportunities are constrained by remoteness from large markets and foreign suppliers, the small size of the domestic market, as well as the high frequency and intensity of natural disasters. These challenges have translated into comparatively low and volatile gross domestic product (GDP) growth rates, a structural gap between domestic revenues and expenditures, elevated public debt, high vulnerability to external shocks, and, subsequently, a significant reliance on development aid.

4.2.2 Health and Healthcare Services

Samoa has been at risk of major epidemics, including H1N1 in 2009, Chikungunya in 2014, Ebola in 2015, and the Measles Epidemic in 2019. On November 15, 2019, the Government of Samoa declared a State of Emergency following a wide scale measles outbreak, which had a significant impact on the population and the health care system. There were 5,700 measles cases and 83 measles-related deaths, the majority of whom were children. The outbreak placed considerable pressure on the overall fiscal sustainability of the country as well as an already strained health system. The fact that Samoa is just emerging from the outbreak also limits the Government's capacity to effectively respond to COVID-19, a second epidemic in the same fiscal year.

Samoa has some of the highest risk factors for non-communicable diseases (NCDs) in the world, including 84% of the adult population being overweight or obese, and NCDs accounting for 80% of the total disease burden and more than half of all premature deaths in the country. Data from other settings show that people with underlying conditions such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer are at higher risk for having severe disease and death. Due to the high prevalence of hypertension, diabetes and cardiovascular disease in Samoa, the population's risk of developing a severe disease associated with COVID-19 is considered very high.

Samoa's health system remains weak and not well positioned to respond to its current and future challenges including both the novel infectious diseases outbreaks and NCDs. The Country has two referral hospitals: Tupua Tamasese Meaole (TTM) National Hospital is the main national referral hospital located in Apia, Upolu, and Malietoa Tanumafili II Hospital (MTII) on Savai'i. In addition, there are eleven primary health facilities consisting of six District Hospitals (3 in Upolu and 3 in Savai'i), and five health centers (3 in Upolu and 2 in Savai'i). The rural health facilities are strategically placed based on population size and distance. The allocation of resources (personnel, equipment, supplies, infrastructure and vehicles) is skewed towards TTM hospital, and the primary health care facilities are under-resourced and under-staffed. Doctors are concentrated in the main referral hospital in Apia with the other 11

primary health care facilities almost exclusively staffed by nurses with a physician visiting one day a week. Basic infrastructure, diagnosis equipment and competencies are lacking in the primary health care facilities and therefore the facilities lack the capacity to diagnose and manage a Covid-19 outbreak.

Laboratory capacity in Samoa for diagnostic testing for COVID-19 consists of two small labs currently located in the two referral hospitals in the islands of Upolu and Savai'i, both are outdated with limited diagnostic capacity. Samoa has three GeneXpert machines for TB testing, with two located in the main referral hospital in Apia, and one located in MTII hospital in Savai'i. The three machines can be used for COVID-19 testing, but training on COVID-19 testing is needed for the lab technicians. In addition, despite the availability of the GeneXpert machines, Samoa currently has no COVID-19 test cartridges, thus no COVID-19 test can be performed in Samoa. Overall, laboratory support for disease detection and response as well as biosafety capacity and regulations is limited.

Since the measles outbreak in 2019, Samoa has made efforts to strengthen its level of epidemic preparedness. The MOH prepared its Health Sector Recovery Progress Report outlining the health sector's response to the measles epidemic. This included strengthening outreach services to the community and empowering community development through the Komiti Tumama, to carry out public health outreach programs - immunization, environmental health, food safety, school health and all other public health programs. Training for health care workers on effective vaccine management, proper immunization techniques, injection safety, proper recording and reporting was included. Other activities included strengthening of the extended program for immunization in Samoa, strengthening surveillance and identification of isolation rooms at the Tupua Tamasese Meaole Hospital in Upolu and the Malietoa Tanumafili II Hospital in Savai'i. While all these activities will help in the response to COVID-19, they are largely focused on measles and the vaccination program. During the measles outbreak, about 30 ventilators were either provided by development partners or brought into the country by the international emergency medical teams.

The priority areas identified by the government for immediate support and long-term capacity building include negative pressure wards, essential medical supply, training of emergency medical team, infection prevention and control, medical waste disposal, laboratory diagnostic capacity, surveillance and epidemiologic investigation, and community-based risk communication. In addition, with only 10 isolation beds currently available at the Faleolo District Hospital, Samoa's clinical management capacity for COVID-19 is severely limited.

4.2.3 Vulnerable groups

Information in this section is sourced directly from a DFAT study titled - *Pacific social protection series: poverty, vulnerability and social protection in the Pacific*¹

In Samoa, while pockets of poverty persist, absolute poverty has been largely mitigated by traditional and formal social protection instruments. At the same time, Samoa is experiencing greater prevalence of hardship, as global trends and agricultural shocks have dampened progress in improving livelihoods for subsistence farmers and for households depending on informal sector activity. The DFAT study identifies

¹ Australian Agency for International Development (2012) - <https://www.dfat.gov.au/sites/default/files/samoa-case-study.pdf>

six vulnerable groups in Samoa and highlights that new vulnerabilities are emerging for these groups from the transition to a cash economy, urbanization and changing societal norms:

- **Women** – Samoa’s socio-political tradition continues to be largely patriarchal affecting women’s participation and representation in society. Women in Samoa are under-represented in the formal labor market (37% full time and 16 % part-time jobs and overrepresented in the informal ‘care economy’ completing 70% of family and community work. Violence against women is high in Samoa with 41 percent of ever-partnered women experiencing physical violence by an intimate partner and 20% experiencing sexual violence.
- **Youth** – Limited employment opportunities is the most pressing challenge for Samoan youth. Youth also face health-related challenges including mental health and suicide, sexual and reproductive health and substance abuse.
- **Children** – Households with children are more likely than other groups to face hardship and experience high impacts from economic shock. Children in households experiencing hardship are more likely to suffer from inadequate access to health and education services.
- **Older people** – Older people in Samoa are increasingly vulnerable because of rural-to urban migration and the erosion of traditional social structures. Older people rely heavily on family members and collective community assistance. However, this support structure is changing as more young people shift from working in agriculture to cash-generating jobs in urban areas.
- **People living with a disability** – Opportunities for people with disability in Samoa are limited due to the lack of access to appropriate services and facilities. Eight-five percent of children with a disability live in rural areas and most have never attended school or only done so for limited periods. An increasing number of people are becoming disabled as a result of a rise in chronic illnesses (such as diabetes)
- **Rural households** - Households in rural Samoa face barriers to developing sustainable livelihoods and improving human capital. Formal employment opportunities are very limited. Transportation and communications infrastructure is far less developed than in urban areas. Individuals in rural areas have poorer access to government services such as education and health.

4.3 Environmental Baseline

4.3.1 Estimated Healthcare Waste Volumes

An estimate of healthcare waste generated in Samoa during calendar year 2019 is provided in Table 4-1.

Table 4-1 Healthcare Waste Generation Estimate – TA Healthcare Waste Assessment (2019)

Samoa	Weekly (kg)	Annually (kg)
Upolu	7,301	379,000
Savaii	1,000	52,000
Total	8,301	431,000

4.3.2 Healthcare Waste Transport

There were two specialized healthcare waste trucks in Samoa, both purchased in 2004 with the correct technical parts and specifications in terms of movable ramps, storage bins containment and holding bins. However, only the healthcare waste truck on Upolu is now in use, while the healthcare waste truck on Savaii is broken down at the main hospital and a substitute vehicle is used. While the operational healthcare waste truck in Upolu is still working adequately including the ramp and restraints, it is physically worn with a high number of kilometers. Replacements for both vehicles are urgently needed with all specifications and standards similar to the existing trucks to ensure safe and secure loading and transport.

Trucks are clean and regularly washed, but the drivers only have minimal PPE, no spill kits, no signage and no manifest of load carried except for a notebook with some recording of pickups. Records taken are not part of any established recording plan.

A one to two-man collection team works on the pickup on Upolu and one-man collection team in Savaii, but they also double up as the incinerator operators.

4.3.3 Healthcare Waste Treatment

All potentially infectious healthcare waste in Samoa is currently treated by incineration. This occurs through the Ministry of Health owned and operated high-temperature incinerators. High temperature incineration of hazardous healthcare waste takes place at two locations in Samoa as indicated below.

There is no healthcare waste in Samoa that is disposed to landfill.

TTMH Incinerator, Tafaiata, Upolu

The Tupua Tamasese Meaole Hospital uses an Entech incinerator designed to burn at high temperatures. It is located away from the hospital and housed in an undercover building. The closest residential house is approximately 20 meters away. At present, this unit is sufficient in scale and effectiveness to treat all healthcare waste, and those provided by surrounding healthcare facilities.

Though the Entech unit is operating well below optimum temperature range (only 800 degrees and not 1100 degrees) resulting in excessive smoke and breaching international best practice standards and requires higher levels of technical expertise to rectify this issue.

The TTMH incinerator is at full technical capacity and is used to burn healthcare waste 7 days a week with the two staff conducting both the incineration and the healthcare waste pick up.

Any increase in healthcare waste treatment (such as eliminating stockpiles) can only be achieved through increasing the number of burn cycles per day (generally there are two) and this would require more staff, longer operational hours and more fuel.

Given the incinerator is now 15 years old, a replacement unit with a higher capacity due to inevitable increases in healthcare waste is required.

MTH Incinerator, Vaiaata, Savaii

The Malietoa Tanumafili II Hospital has two MediBurn 20 model incinerators (neither currently operational). One Mediburn unit is still being used by manually burning waste at low temperatures.

They incinerators are located within a dedicated building away from the hospital and community (approximately 1km from the nearest house and Vaiaata Prison). A replacement incinerator sufficient in scale and effectiveness is required to treat all of its healthcare waste, and those provided by surrounding healthcare facilities.

The two 2011 Mediburn units are inoperable and have been for many years. They are rusted, have pieces missing and are housed in a metal shed with the roof in poor condition and without any ongoing maintenance and repair budget.

Despite this problem the officer responsible for healthcare waste collections and treatment still uses one mediburner manually which enables all the waste to be treated though at suboptimal temperatures. The incinerators and building need to be substituted with better quality replacements with a dedicated budget for operational maintenance and repair.

In relation to treatment capacity, the MTH incinerator is at full technical capacity even though it is actually not working which is a heavy workload for the one staff member who conducts both the incineration and the healthcare waste pick up.

4.3.4 Healthcare Waste Disposal

Both healthcare waste incinerator sites use ash disposal pits that have been established next to the incinerators.

It is unclear if such disposal is appropriate as incinerator ash can contain heavy metals, persistent organic pollutants (POPs) and other products that could impact on water sources or underground water. While ash that is not properly disposed of can also become air borne if not properly covered with some soil material and could be inhaled unintentionally by MoH officers or residents near the incinerator sites.

It is unlikely the incinerator operators have adequate PPE for dealing with collection of final ash from the incinerators, including goggles, facemasks or respirators.

4.4 National COVID-19 Response

No confirmed cases of COVID have been reported until May 20, 2020 however, Samoa faces a high risk of importation of COVID-19, given its close ties to New Zealand and Australia which have recorded 1,132 and 6,762 confirmed cases as of April 30, 2020. Learning from the measles outbreak, Samoan Authorities have been very proactive in preventing the importation of COVID-19 into Samoa. Samoa was one of the first countries in the Pacific to respond to the COVID-19 threat by imposing strict travel restrictions on January 17, 2020. On March 20, 2020, Samoa declared a state of emergency, including an order to shut down the border for all except returning Samoan citizens. A draft of its National Epidemic and Pandemic Influenza Preparedness and Response Plan FY2020/21 – FY2024/25 has been quickly developed. The National Emergency Operations Centre (NEOC), which is the focal point providing collaboration and operational coordination amongst all stakeholders, with advice and technical guidance from the MOH, has been activated. The activation of NEOC is part of Samoa's National Emergency Response Plan as per the National Disaster Management Plan under the National Disaster and Emergency Act 2007. Two hotlines and two helplines were quickly established. Surveillance Response Teams continue to undertake clinical assessments, epidemiological investigation of cases notified from the Tupua Tamasese Meaole Hospital and rural Districts Hospitals, and the Teams are also conducting

monitoring visits to the eight quarantine sites (mostly hotels), and to those in isolation at the Faleolo Healthcare Centre. An emergency medical team was assembled with initial training provided by WHO.

The government of Samoa is working closely with development partners to strengthen its response capacity to COVID-19. Since the measles outbreak in November 2019, development partners have been providing both financial and technical support. The World Bank provided US\$3.5million through the Second Resilience Development Policy Operation with a CAT-DDO after the measles outbreak and provided another US\$5.1 million in immediate funding from the same facility to support Samoa's response to the COVID-19. WHO and UNICEF have continued to provide technical support on risk communication, training of emergency medical teams, PPEs at early stage of the COVID-19 pandemic and have pledged to provide additional PPE supply and testing cartridges. The Chinese Government is providing PPEs and medical supplies. The Asian Development Bank (ADB) is providing budget support of US\$2.9 million through its Contingency Disaster Response Facility and the New Zealand MFAT and Australian DFAT will provide budget support to address social and economic impacts. The Government of Samoa intends to finance a negative pressure unit, the operation of five quarantine sites and isolation units as well as the operations of the NEOC during the State of Emergency. In addition, the Government is securing funds from its State-Owned Enterprises (SOEs) to implement its overall COVID-19 economic stimulus package as appropriated in the Second Supplementary Budget tabled in Parliament on April 7, 2020. To complement this emergency project, the World Bank will finance critical medical supplies under the Contingent Emergency Response Component of the Pacific Resilience Project with total US\$500,000.

Notwithstanding the foregoing support, gaps remain. The World Bank has been supporting the health sector in Samoa since 2000. The current support to the health sector (Samoa Health System Strengthening Program for Results) is focused on scaling up the essential interventions of NCD control at the primary health care and community setting. Consequently, its design, with a focus on NCDs, does not make it an appropriate vehicle for supporting the COVID-19 activities however it will complement the support proposed under this Project. The support proposed under this Project will complement those activities supported by other development partners, fill the currently known gaps, while remaining flexible to respond to changing circumstances as the pandemic unfolds, and based on the strengths of the various institutions supporting the country in this endeavor.

4.4.1 Testing for COVID-19

Samoa does not have the capacity to carry out in-country laboratory testing for COVID-19. Samples collected have to be sent to New Zealand or Australia. The lack of in-country lab testing capability impacts Samoa's ability to undertake early detection and close contacts tracing of suspected cases.

5 Potential Environment and Social Risks and Mitigation

This section describes the potential environmental and social risks and impacts associated with identified activities that will be supported by the Project. The identification of potential risks and impacts are grouped into the different activity stages; Planning, Construction, Operation and Decommissioning.

Overall, the Project will have a long-term positive environmental and social impact, as it will improve COVID-19 surveillance, monitoring, treatment and containment in Samoa. This includes the ability to safely treat and dispose of medical waste. Nevertheless, in the short-term the environmental and social risks are considered substantial.

5.1 Summary of Main Environmental and Social Risks

The main environmental and social risks identified are:

- (i) Minor adverse environmental and social risks associated with small-scale construction activities for a new Ministry of Health laboratory. This includes construction and fit-out of a new single-story building at Tupua Tamasese Meaole Hospital in Apia
- (ii) Minor adverse environmental and social risks associated with small-scale construction activities for a new healthcare waste incinerator in Savai'i. This includes construction of a small concrete pad and building for the prefabricated incinerator. New incinerator will be placed on the same location as the old one
- (iii) Environmental, Occupational health and safety issues relating to collection, handling, transport and incineration of healthcare waste. Including operation of the new incinerator and medical waste collection trucks.
- (iv) Occupational health and safety issues relating to laboratory technicians and medical crews working within the new laboratory facility. This includes the handling of chemicals, samples, sharps and infectious material.
- (v) Community health and safety issues associated with distribution of chemicals to public buildings
- (vi) Environmental and community health related risks from inadequate storage, transportation, disposal or treatment of medical waste.
- (vii) Occupational health and safety issues related to the availability and supply of personal protective equipment (PPE) for healthcare workers dealing with COVID19 patients

As all civil works will be within existing government owned sites, environmental and social risks associated with these works are expected to be minor and readily mitigated. No land acquisition or involuntary resettlement impacts are expected.

While the contextual environmental risks are assessed to be high, the COVID-19 emergency operation is not expected to generate large volumes of medical waste with high population proximity exposed to this waste. Due to the resulting low probability of serious adverse effects to human health from exposure to medical waste, and the fact there are known and reliable mechanisms available to prevent or minimize such exposure, the environmental risks are considered temporary, predictable, and readily managed through project design features, construction and operation phase and mitigation measures and capacity building for the operation phase.

5.2 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 safeguard tools that are required.

The mitigation measures and environmental and social instrument are guided by ESF, WHO and national guidelines and requirements.

Table 5-1 Key project risks/impacts and proposed mitigation – Planning and design stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
Planning and Design Stage			
Procurement of goods and supplies including PPE, test kits, chemicals and laboratory consumables	<p>Incorrect standard or quality of PPE leads to spread of infection to health-care workers and cleaners.</p> <p>Incorrect handling, storage and transportation of chemicals exposes workers to health and safety risks or renders them unusable.</p> <p>Negative reaction to perceived fairness of goods distribution.</p>	<p>Ensure WHO specifications are used for the procurement of PPE and test-kits.</p> <p>Ensure chemical labelling and safe handling data sheets are provided and followed during procurement of chemicals and consumables.</p> <p>Ensure programs are equitable and involve stakeholder engagement principles / are consistent with the SEP.</p>	<p>ESMF, Procurement documents – environmental and procurement specialists will support the Borrower in ensuring that the tender documents contain the right specs and standards aligned with ESF.</p>
Design, prefabrication and procurement of a healthcare waste incinerator	<p>Design of the waste incinerator is not fit-for-purpose resulting air quality issues during operation, overly technical or expensive maintenance requirements or residual waste debris/ash that is not adequately sterilized.</p> <p>Pre-shipment assembly of prefabricated unit is not adequately inspected resulting in commissioning issues and sub-optimal incineration of medical wastes.</p>	<p>Annex II provides technical specifications for procurement of the healthcare waste incinerator.</p> <p>Ensure the supply contract includes a dedicated after sales service and maintenance plan between MOH and the supplier. For example, six monthly site visits and unlimited virtual support. A separate warranty obligation parts is required as well as provision of spare parts.</p> <p>The Defects Liability should include repair or replacement of faulty components.</p>	<p>Environmental and social design standards/ requirements</p> <p>Procurement documentation</p> <p>Development Consent under EIA Regulation 2007 as per National Samoan Environmental legislation.</p>
Procurement of two healthcare waste trucks	<p>Truck specification is not suitable for collection and transportation of medical waste.</p>	<p>Specification requirements include movable ramps and storage bin containment features. Trucks also require appropriate signage.</p>	<p>Procurement documents – environmental and procurement</p>

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
	Procured trucks are not fit for purpose for the local Samoa context i.e. road conditions, availability of spare parts, climatic conditions.		specialists will support the Borrower in ensuring that the tender documents contain the right specs and standards aligned with ESF.
Procurement of equipment with higher OHS or environmental risk like portable X-ray machine		<p>Ensure the supply contract includes a dedicated after sales service and maintenance plan between MOH and the supplier as well as decommissioning. A separate warranty obligation parts is required as well as provision of spare parts.</p> <p>The Defects Liability should include repair or replacement of faulty components.</p>	Procurement documents – environmental and procurement specialists will support the Borrower in ensuring that the tender documents contain the right specs and standards aligned with ESF.
Civil design for waste incinerator pad and housing unit (waste management facility)	<p>Design does not take into consideration stormwater management requirements resulting in potential soil erosion, flooding or water quality issues during operation.</p> <p>The design does not consider adjacent sensitive receiving environments including watercourses, residential houses or hospital wards resulting in amenity issues such as noise, air quality or odor issues.</p> <p>The design does not take into consideration the health and safety of MoH staff operating the incinerator resulting in unnecessary risks during operation.</p>	<p>Ensure the contractor installs a concrete base on which with adequate structural integrity to support long-term operation of the incinerator. The contractor shall install appropriate housing for the incinerator that minimise the effects of weather events, natural disasters and stormwater runoff. Design should consider minimum distances from buildings needed for safe operations and to avoid amenity impacts. The prevailing wind direction should be considered when selecting the incinerator pad location.</p> <p>Design documentation should include consideration of residual ash disposal.</p>	<p>Designed as per Samoa COEP</p> <p>Worker H&S requirements as per the ESMF and LMP.</p>

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
	Design does not consider appropriate options and the preferred method for disposal of residual ash.		
Design of the laboratory facilities	<p>The design of the laboratory facility does not meet layout and engineering requirements for avoiding the spread of infectious diseases and appropriate handling of contaminated material. Including material infected with COVID-19.</p> <p>Design of new facilities does not consider universal access e.g. women and users with disabilities.</p> <p>Design of new facilities does not consider pretreatment of laboratory wastewaters.</p> <p>Laboratory facilities that are not covered by adequate life and fire safety (L&FS) risk assessment and mitigation measures.</p>	<p>Design of facility should consider guidance from WHO on COVID-19 management and infection control.</p> <p>Design of facility should consider GIIP on waste waters and design the system to meet the pretreatment and monitoring requirements of the sewer treatment system into which it discharges.</p> <p>Consideration of the need for differentiated access for different users of the facilities in the design. Consultation in accordance with the SEP.</p> <p>Laboratory will be build as Biosafety 2 and design will respect standards building codes.</p> <p>L&FS master planning should be included in the design of the new facilities in line with GIIP and national legal requirements. The laboratory should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression.</p>	Building permit in accordance with national requirements (PUMA)
Procurement of TA for training and capacity development activities	Covid-19 travel restrictions and Samoa's current State of Emergency boarder closure prevent or discourage suitable candidates from participating in the tender process.	Insure minimum selection criteria and requirements for physical presence in country are taken into consideration within Terms of Reference.	N/A

Table 5-2 Key project risks/impacts and proposed mitigation – Construction stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
Construction Stage			
Construction of waste incinerator slab and housing unit. Delivery,	Minor civil works may generate limited adverse environmental impacts such as noise, construction waste, excess spoil from minor earthworks, traffic	Construction works should be undertaken in accordance with the Samoa Code of Environmental Practice (COEP).	In accordance with Samoa COEP.

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
Installation and commissioning of incinerator.	disruption and occupational and/or community health and safety.	Waste minimization and management measures detailed in Waste Management Plan.	Environmental and Social Management Plan.
Construction of laboratory facility.	Increase in harassment and/or gender-based violence (GBV) in workforce.	Construction health and safety (H&S) management plans developed, and construction works completed accordingly.	Waste Management Plan.
	Cultural heritage impacts.	Labor issues addressed in LMP. Define GBV requirements in construction H&S plan and contractor procurement documents.	Construction H&S Plans with GBV requirements defined.
		Chance Finds Procedure in place (Annex III)	LMP.
			Chance Find Procedures

Table 5-3 Key project risks/impacts and proposed mitigation – Operational stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
Operational Stage			
Operation of healthcare waste incinerator, including operation of new medical waste collection trucks.	Occupational health and safety issues as well as community health and safety issues related to improper collection, handling and transport of infectious or hazardous healthcare waste. Non-compliance with waste transport and disposal guidelines and procedures.	A Labor Management Procedures (LMP) developed and implemented.	LMP
	Fatigue, gender based violence among workers, or working under the influence of drugs or alcohol.	Worker H&S Management plans will be developed	Worker H&S plans
	Registration and regular maintenance of waste transport vehicles.	Clear communication of risks and prevention measures will be included within training and stakeholder engagement activities.	After Sales Service Agreement
		Leather gloves and full-face shields required for incinerator operators	Operation and Maintenance Plan with the Waste Management Plan (for incinerators in Savaii and Upolu)

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
	<p>Air quality affects due to incinerators operating at suboptimal temperatures. Operation temperature is not high enough to appropriate treat infectious material and is causing toxic emissions due to incomplete combustion.</p> <p>Lack of ongoing maintenance causing incinerators to breakdown and a backlog of waste material being stored onsite.</p> <p>Incorrect disposal of ash causing adverse environmental impacts and/or spreading of infectious material.</p>	<p>Waste truck drivers must have valid Samoa driver license. The Ministry of Health Wastecare Principal Officer will provide training to drivers regarding correct collection, handling and OHS techniques.</p> <p>Operation and Maintenance Plan will apply for both Upolu and Savaii incinerators, and will strive to improve efficiency and environmental performance especially related to air pollution control measures and management of incineration residues such as fly ash, bottom ash. Regular monitoring of environmental parameters will be integral part</p> <p>Training and capacity development activities for Ministry of Health workers on the correct way to operate incinerators</p> <p>Waste management Plan will tackle management of solid, hazardous and liquid waste generated by health sector. It will also look at wastewaters.</p>	
Operation of the laboratory facility.	<p>Occupational health and safety issues related to the delivery and storage of goods, including samples, pharmaceuticals, reagents and other hazardous materials.</p> <p>Poor sanitation and improper management of solid waste and wastewater. Potential to transmit infectious diseases to lab staff or the community. Pollution of the environment.</p>	<p>An Infection Prevention Control and Health Care Waste Management Plan (IPC&WMP) developed and implemented, as required for biosafety level 2 laboratories</p> <p>The Project will invest in the procurement of appropriate waste management infrastructure, including containers, PPE, and incinerators.</p> <p>Training of medical, laboratory and waste management personnel to ensure compliance with the IPC&WMP, National Healthcare Waste Management Plan 2020, WHO guidance and GIIP.</p> <p>Health facilities shall ensure the provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health. Health</p>	<p>IPC&WMP</p> <p>Development Consent in accordance with EIA Regulation 2007</p> <p>Waste Management Plan prepared as part of ESMF</p> <p>GM</p>

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
		<p>facilities shall establish and apply good practices line with WHO guidance on water, sanitation and waste management for COVID-19 and the IPC&WMP.</p> <p>The IPC&WMP to be developed will contain detailed procedures, based on WHO guidance, for the safe operation of health facilities and protection of the workers from infectious diseases.</p> <p>Grievance mechanism (GM) available to enable communities to raise project related concerns and grievances.</p> <p>Ministry of Health committing to the implementation of the WHO Code of Ethics and Professional Conduct, which includes provisions for SEA/SH prevention in the Project ESCP.</p>	
Operation of equipment with higher OHS or environmental risk like portable X-ray machine	Occupational health and safety issues related to workforce exposure to radiation.	Appropriate procedures should be established for the safe operation of portable X-ray machine. This includes training of staff who will use or be within proximity of the machine.	OH&S procedures as per this ESMF, LMP and the operation manual of the equipment purchased.
Technical assistance activities including training and capacity building programs. This includes supporting existing risk communication and community engagement activities.	<p>Downstream impacts that are contrary to good environmental management and community well-being.</p> <p>Negative reaction to perceived fairness of resource distribution.</p>	<p>As a minimum, include environmental and social safeguards clauses and the requirement for meaningful stakeholder and citizen engagement into the consultants Terms of Reference (TOR) and activities and review the approaches and outcomes for compliance with the ESMF and the World Bank policies.</p> <p>Ensure programs are equitable and involve stakeholder engagement principles / are consistent with the SEP.</p>	SEP

Table 5-4 Key project risks/impacts and proposed mitigation – Decommissioning stage

Activity	Significant Potential Risks / Impacts	Key Mitigation Methods	Safeguard Tools
Decommissioning Stage			
Decommissioning of the waste incineration facilities and laboratory (including old incinerator in Savaii).	<p>Minor demolition works and ground rehabilitation may generate limited adverse environmental impacts such as dust, noise, vibration, solid waste, traffic obstruction and occupational and/or community health and safety.</p> <p>Worker and/or community health and safety risks from left over health-care waste and/or equipment.</p> <p>Increase in harassment and/or gender-based violence (GBV).</p>	<p>Towards the end of the incinerator and laboratory's useable life (approximately 15-20 years), a decommissioning plan will prepared to investigate reuse of salvageable components and appropriate disposal of demolition waste. The decommission plan will also include discussion with the landowner (Government of Samoa/Ministry of Health) and outline any requirements of land rehabilitation and handover.</p> <p>Health and safety management plans developed, and construction and demolition works completed accordingly.</p> <p>Any works would be undertaken in accordance with the Samoa Code of Environmental Practice.</p>	<p>COEP</p> <p>ESMP for new incinerator</p> <p>Waste Management Plan.</p> <p>Construction H&S Plan with GBV requirements defined.</p>
Decommissioning of equipment with higher OHS or environmental risk like portable X-ray machine	Samoa might not have sufficient capacity to properly dispose such equipment	Contract for procuring the equipment should include decommissioning clauses	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 activities proposed for financing that are not included in this ESMF. The screening will consider the risks and then identify the safeguard instruments 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 and (v) monitor application of management plans for those activities requiring E&S due diligence.

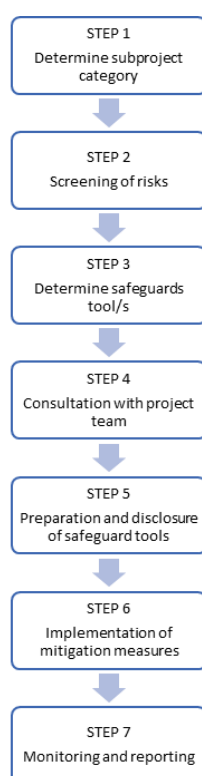
The project typologies identified as requiring environmental and social screening and management during implementation of the Project include; construction, operation, and decommissioning of civil works; technical assistance activities; procurement of goods and supplies; and communication and behavior change interventions.

Responsibilities for implementing these procedures are outlined in Section 9. The screening process should be reviewed after 18 months of project implementation to ensure the process is appropriate.

6.2 Screening of Activities

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

Figure 6-1 Key Activities 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 activity category refer to Annex VII.

Step 2- Screening of Risks

If the activity has been pre-screened as part of Chapter 5, proceed directly to Step 3.

If the activity has not been pre-screened as part of Chapter 5, including CERC activities, and safeguards instrument/s already identified, the next step is to complete the Screening Form for Potential Environmental and Social Issues (Annex VII) and check Table 6-1 – Ineligible Activities.

Step 3 – Determine Safeguards Tool/s

The third step is to determine what sub-project specific safeguards tool/s are required or apply, if any, under World Bank and Samoa safeguards requirements. The subtype screening process (Figure 3 – Screening Process) will assist in determining the safeguard tool/s that need to be prepared.

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 activity design, categorization or safeguard instrument can be refined following this process.

Step 5: Preparation and Disclosure of Safeguard Tools

If required, the next step is to prepare the relevant E&S instruments, both for Samoa and the WB processes. This process may include site visits and data gathering, consultation, and public disclosure of the documents in accordance with the SEP.

Step 6: Implementation of Mitigation Measures

The implementation of the safeguard's tools 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 safeguard instruments are met. For contractors, monitoring and supervision will be needed to ensure that conditions of the safeguard instruments are met.

Step 7: 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 safeguard tools. Monitoring methods must provide assurance that safeguard measures are undertaken effectively.

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

Figure 6-2 Subtype Screening Process

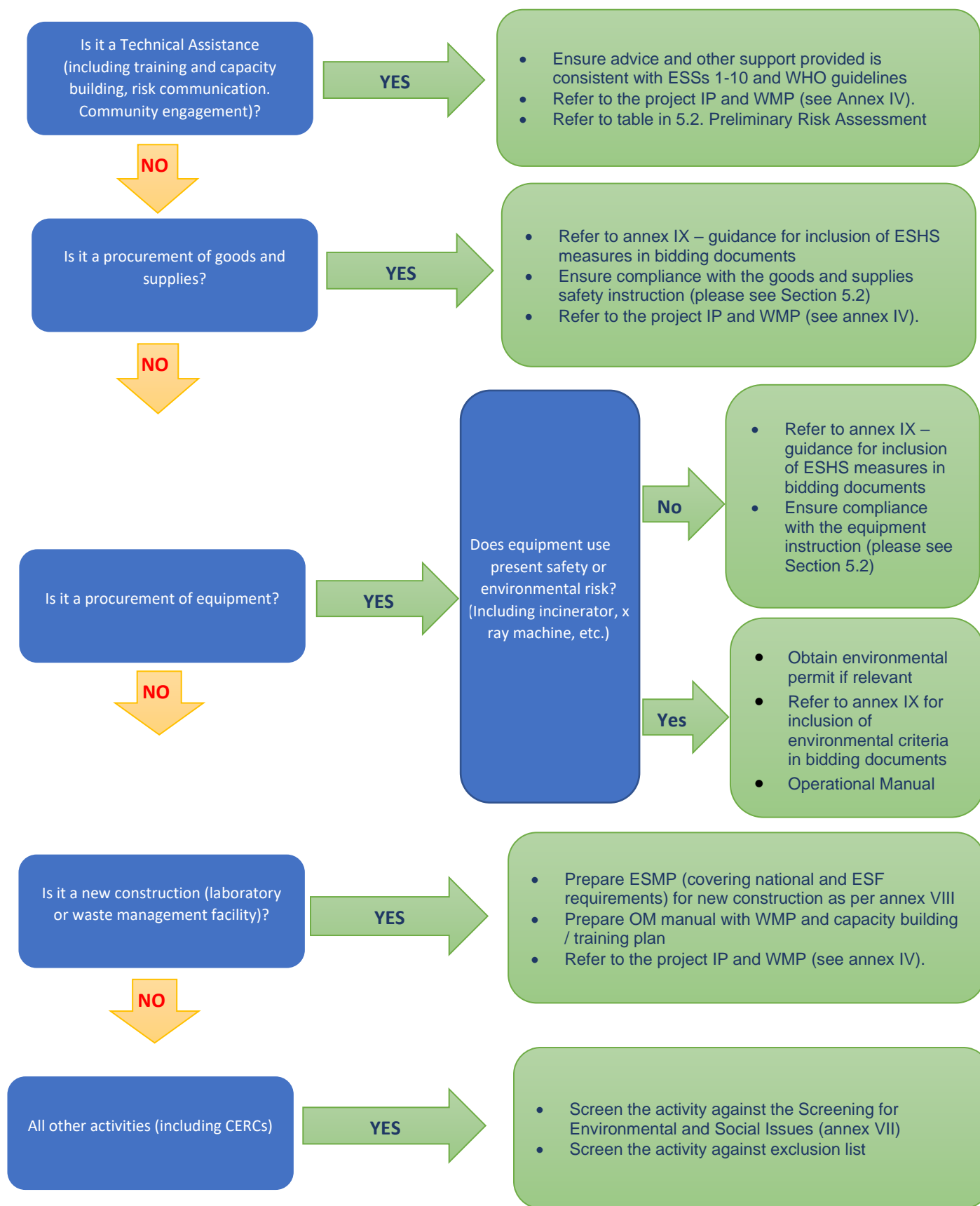


Table 6-1 Ineligible Activity List

Activities will be deemed ineligible for project funding if they:

- 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), i.e. 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 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 tangible or intangible heritage with archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance 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.
- 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 labor, child labor (under the age of 18), or other harmful or exploitative forms of labor; (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.

7 Consultation and Stakeholder Engagement

Stakeholder engagement, consultation and disclosure are tools for managing two-way communication between the project sponsor and the public with the goal of improving decision making and building understanding by actively involving individuals, groups, organisation with a stake in the project – and is a core requirement of the Samoan Code of Environment Practice 3 and the World Bank’s ESS10 Stakeholder Engagement.

The project prepared a stand-alone Stakeholder Engagement Plan (SEP).

The overall objective of this SEP is to define a program for stakeholder engagement around the Project, including public information disclosure and consultation, throughout the entire project cycle. The SEP outlines the ways in which the project team will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about project and any activities related to the project. The involvement of the local population is essential to the success of the project in order to ensure smooth collaboration between project staff and local communities and to minimize and mitigate environmental and social risks related to the proposed project activities. In the context of infectious diseases, broad, culturally appropriate and adapted awareness raising activities are particularly important to properly sensitize the communities to the risks related to infectious diseases.

The specific objectives of the SEP are to:

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

The SEP will be periodically revised and updated as necessary in the course of project implementation in order to ensure that the information presented herein is consistent and is the most recent, 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 the project related activities and to its schedule will be duly reflected in the SEP.

7.1 Project Stakeholders

Project stakeholders are defined as individuals, groups or other entities who: i) are impacted or likely to be impacted directly or indirectly, positively or adversely, by the Project (also known as ‘affected parties’); and ii) may have an interest in the Project (‘interested parties’). They include individuals or groups whose interests may be affected by the Project and who have the potential to influence the Project outcomes in any way.

Affected Parties - persons, groups and other entities within the Project Area of Influence (PAI) that are directly influenced (actually or potentially) by the project and/or have been identified as most susceptible to change associated with the project, and who need to be closely engaged in identifying

impacts and their significance, as well as in decision-making on mitigation and management measures. Affected parties include:

- Ministry of Health officials/staff
- Healthcare Workers (Doctors, nurses, scientists, educators)
- Health waste management workers
- National Emergency Operations Committee (including heads of relevant line agencies)
- Government Ministries
- Other public agencies
- Neighboring communities to the laboratory facility and waste facility
- Contractors and workers at construction sites of the laboratory and waste facility
- People under COVID19 quarantine or self-isolation
- Family members of people under COVID19 quarantine or self-isolation
- COVID19 infected people
- Family members of COVID19 infected people
- Communities (i.e. religions, gender) of COVID19 infected people.

Other Interested Parties. Those individuals/groups/entities that may not experience direct impacts from the Project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way. Interested parties include:

- Traditional media
- Participants of social media
- Politicians
- National and international health organizations
- Non-governmental organizations (NGOs)
- Businesses with international links
- The public at large.

7.2 Consultation and Information Disclosure

A precautionary approach will be taken to the consultation process to prevent contagion, given the highly infectious nature of COVID-19².

7.2.1 Consultation and Information Disclosure during Project Preparation

The Government of Samoa activated the National Emergency Operations Centre (NEOC) on Friday March 20, 2020. NEOC is leading the Government's response to the COVID-19 global crisis. The NEOC comprises representatives from all 14 government sectors including the health sector. NEOC is the focal point providing collaboration and operational coordination amongst all stakeholders, with advice and technical guidance from the MOH for the duration of the emergency period. Information disclosure and stakeholder discussion during project preparation have occurred through the NEOC. Wider community

² [Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings.](#)

consultation has not occurred due to the current State of Emergency in Samoa restricting gatherings of more than five people.

Consultation during preparation of this ESMF targeted directly affected government stakeholders. Two preliminary meetings were held during the week of 27 April and 4 May 2020 between the Health Sector Coordination, Resourcing and Monitoring Divisions, CTSSU Safeguards Specialist and World Bank Environmental and Social Specialists. The preliminary discussions focused on implementation arrangements, roles and responsibilities, WB expectations and Safeguard requirements. A further consultation session was held on 15 May for a select group of Stakeholders (less than five). This included representatives from the Samoa Water Authority; Ministry of Works and Transport Infrastructure; Ministry of Woman; Community and Social Development; Ministry of Commerce, Industry and Labour; and Ministry of Health.

. The purpose of this meeting was to discuss the requirements of the ESMF and the proposed implementation arrangements. From this meeting, the need for additional one-on-one sessions with stakeholders during implementation was identified.

The ESMF has been disclosed on MOF's and the World Bank's website <https://www.mof.gov.ws/>.

7.2.2 Consultation and Disclosure during Implementation

Two-way mechanisms for ongoing consultation are necessary throughout the life of the project, to disclose information and seek feedback. Dedicated channels for information dissemination will be established to ensure consistent communication at national, subnational and local levels throughout the Project. Table 7-1 and Table 7-2 outlined consultation and information requirements during project implementation.

Table 7-1 Consultation during Project Implementation

Project stage	Topic of consultation / message	Method used	Target stakeholders	Responsibilities
Design and implementation	Project design; project implementation progress	National Emergency Operations Centre (NEOC) Coordination meetings	NEOC	MOH/HSCRM
	Project design; project implementation	Correspondence by phone/email; one-on-one interviews; formal meetings; roundtable discussions	Government Ministries	MOH/HSCRM
Implementation	Environmental, Social and Health and Safety, Worker GRM	Internal MOH communication channels; Formal and on-the-job training	MOH officials/staff Healthcare Worker Health waste management workers	MOH/HSCRM

Project stage	Topic of consultation / message	Method used	Target stakeholders	Responsibilities
	Information of laboratory and waste management facilities; E&S impacts and management measures; GRM	Letters to village leaders; community consultations; disclosure of Project documentation in a culturally appropriate and accessible manner	Affected communities (including vulnerable groups)	MOH/HSCRM
	Environmental, Social and Health and Safety, Worker GRM	Provide site-based ESMP to contractor; Site meetings	Works contractors	MOH/HSCRM
	Information on project activities; E&S impacts and management; GRM	ESMF consultation workshop; dissemination on MOH website; MOH hotline; local media	General Public	MOH/HSCRM

Table 7-2 Information Disclosure during Project Implementation

Project stage	Target stakeholders	List of information to be disclosed	Methods and timing proposed
Design; Implementation	NEOC and Government Ministries	Project design documents; work plan; procurement plan; progress reports	Internal GOS communication channels including letters/memos/emails and round table meetings
	General Public	ESCP, ESMF (and associated instruments); SEP (and GRM)	MOH website and dissemination of hardcopies at the MOH office and other relevant project sites
Implementation	MOH officials/staff Healthcare Worker Health waste management workers	Activity information; ESMF and associated instruments; relevant procedures; LMP & Worker GRM	Internal MOH communication channels including letters/memos/emails
	Affected communities (including vulnerable groups)	Project design information; ESMP; GRM	Traditional channels; consultation meetings; Information leaflets and brochures; Separate focus group meetings with vulnerable groups, as appropriate

Project stage	Target stakeholders	List of information to be disclosed	Methods and timing proposed
	Works contractors	Project design documents; ESMP and GRM	Email and hard copy

7.2.3 Reporting Back to Stakeholders

Consultations with stakeholders will be the main mechanism to inform them of the project and to get their feedback. MOH will ensure there are notes of project meetings and incorporation of comments into project documents when applicable. Stakeholders who provide specific suggestions will be followed up with after consultations with feedback on how their comments were considered. For instance, an email, message and/or official letter will be sent after workshops (in person or virtual) on how comments/suggestions were considered.

8 Grievance Redress Procedures

8.1 Project Grievance Mechanism

The Ministry of Health Complaints and Grievance Policy 2015 was established to assist with resolving complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. It provides a transparent and credible process for fair, effective and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions. Specifically, policy established Grievance Mechanism that:

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

Grievances will be handled by the MOH/ HSCRM. The overall GM will be managed by the Project Manager within the MOH HSCRM. The HSCRM will collect grievances issued to health facility, contractors, district office or directly to the MOH; receive grievances directly; record grievance and ensure a timely response to the complainant. Individuals can lodge information requests and/or complaints on an identified or anonymous basis. Details on how to access the GRM will be widely distributed as part of the SEP implementation.

The GRM process will include the following steps:

- Step 1: Submission of grievances and/or information request either orally or in writing to designated focal point in health facility, contractors, or district office. If the complaint/request cannot be resolved within 7 days of receipt, it advances to stage 2 of the grievance process.
- Step 2: If the aggrieved person is not satisfied with the outcome of initial stage consideration, the aggrieved person can refer the issue to the MOH HSCRM Project Manager either orally or in writing. If the complaint cannot be resolved within 7 days of receipt, it advances to stage 3 of the process.
- Step 3: If the aggrieved person is still dissatisfied with the stage 2 process, the Project Coordinator the grievance is raised with the National Emergency Operations Center and including the Project Manager as an observer. The committee is to consider and seek resolution to the case at the next scheduled NEOC meeting.

Once all possible redress has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse.

Grievances relating to Sexual Exploitation and Abuse or Sexual Harassment will be forwarded directly to HSCRM Manager who will be trained in responding to these types of grievances.

In the instance of the COVID-19 emergency, existing grievance procedures should be used to encourage reporting of co-workers if they show outward symptoms, such as ongoing and severe coughing with fever, and do not voluntarily submit to testing.

8.2 World Bank grievance redress

Communities and individuals who believe that they are adversely affected by a World Bank-supported Project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's Grievance Redress Service (GRS). This Service ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel that determines whether harm occurred, or could occur, because of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service, please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank's Inspection Panel, please visit www.inspectionpanel.org.

9 Safeguards Implementation Arrangements, Responsibilities and Capacity Building

9.1 Implementing Agency

The MOH will be responsible for implementation of the project, including overall coordination, results monitoring and communicating with the World Bank on project progress. The MOH will have the overall responsibility for ensuring that environmental and social issues are adequately addressed in accordance with this ESMF.

The project will rely on the MOH's existing organizational structure, including the involvement of the National Emergency Operations Centre (NEOC) that has been established to manage the COVID-19 emergency response plan. MOH technical departments and division – Public Health Services, Hospital and Clinical Services, National Health Surveillance and International Health Regulations Division will be involved in project implementation based on their functional capacities and institutional mandates. The Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division is responsible for coordinating and managing development assistance that are channeled through the MOH for health sector development, including the recently approved Samoa Health System Strengthening Program (P164382). This division works to pool the resources of the whole health sector, focusing on the coordination, distribution, and monitoring of resources and finances as well as the progress of the Health Sector Program.

A copy of the Ministry of Health organizational structure is provided in Annex XI.

9.2 National Emergency Operations Centre

The Government of Samoa, under established mechanisms for emergency response, activated a National Emergency Operations Centre (NEOC), which serves as the emergency response headquarters. The Government of Samoa issued the Proclamation of a State of Emergency for COVID19 on Friday March 20, 2020, which effectively activated the NEOC to lead its response to the Coronavirus (COVID-19) global crisis. The NEOC comprises representatives from all fourteen government sectors including the health sector. NEOC is the focal point providing collaboration and operational coordination amongst all stakeholders, with advice and technical guidance from the MOH for the duration of the emergency period. A Health Emergency Operations Center (HEOC), which is a 40+ multi-disciplinary team chaired by the Director General of Health established to manage the measles outbreak response, is also the focal point on monitoring the global and regional spread of COVID-19 and has put in place several prevention measures including tight border controls and media campaigns.

9.3 Key Project Safeguards Responsibilities

Health Sector Coordination, Resourcing and Monitoring Division

The Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division will perform the day-to-day project management by providing support to the relevant MOH divisions in implementing project activities in line with the ESMF and associated instruments. This includes procurement of medical supplies, commodities and equipment, and civil works contracts for the waste management facility and laboratory.

A E&S Consultant will be engaged to support the implementation activities and provide capacity building to personnel within the Ministry of Health. The international or domestic technical assistance will ideally have experience in the implementation of World Bank safeguards instruments and in particular, implementing SEP, IC&WMP, ESMF and ESMP.

The MOH will also be able to draw upon the specialists from the CTSSU within MOF to provide technical support and hands on assistance in implementation of the Project.

The HSCRM, with the support of the E&S Consultant, 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 and relevant E&S instruments
- Status of preparation and implementation of The Project's environmental and social documents,
- Stakeholder engagement activities and grievances log, Labor Management Procedures
- Contractor's ESHS implementation (when required for the improvement of physical facilities/equipping the existing facilities
- ESHS incidents and the functioning of the grievance mechanism.

Healthcare Protection and Enforcement Division

The Healthcare Waste Principal Officer is currently responsible for overseeing the management of collection, transport, treatment and disposal of medical waste in Samoa. No safeguards resources are in place within the Healthcare Protection and Enforcement Division and there is little experience with the Bank's environmental and social safeguards requirements.

To address this, the HSCRM recruited E&S Consultant and the CTSSU will jointly develop the knowledge and capacity of the Healthcare Waste Principal Officer regarding the implementation of Safeguards instruments. It will be hands on support for the Healthcare Waste Principal Officer with ESMF implementation during design, procurement, and installation of the healthcare waste incinerator. This includes the Occupational Health and Safety requirements, Community Engagement and preparing any safeguards instruments such as ESIA and ESMP.

Health Surveillance Division

The Principal Laboratory Officer is responsible for the management of day-to-day operations of Public Health laboratory activities. HSCRM recruited E&S Consultant and the CTSSU will jointly develop the knowledge and capacity of the Principal Laboratory Officer regarding the implementation of Safeguards instruments. It will be hands on support for the Principal Laboratory Officer with ESMF implementation during design, construction and operation of the new Public health Laboratory and healthcare waste incinerator. This includes the Occupational Health and Safety requirements, Community Engagement and preparing any safeguards instruments such as ESIA and ESMP.

Environmental and Social Consultant

The E&S Consultant will report directly to the ACEO of the HSCRM and will function as a core member of the Covid-19 Response project team. The role is to ensure that environmental, social, health and safety risks are managed in accordance with the requirements of the World Bank's ESF, WHO Guidance on COVID-19, and Samoan Law. Specifically the E&S Consultant will:

- Lead the implementation of the project's ESMF and associated instruments in accordance with the World Bank ESF, project ESCP and Samoan legal requirements including:
 - Develop and deliver ESHS training for the Ministry of Health
 - Environmental screening, preparation and disclosure of site-specific instruments, consultation and information dissemination activities with relevant stakeholders;
 - Site-based environmental, safety and social monitoring. Address non-compliances, develop and confirm the implementation of corrective actions.
 - Preparation of 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 that 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 ACEO of HSCRM and the World Bank Social Specialists.
- Coordinate the implementation of the project's GM ensuring timely resolution of project related grievances.
- Be responsible for the preparation of an Operational Manual for the healthcare waste facility and associated training of Ministry of Health operators.
- Participate in semi-annual Project Supervision missions, representing Ministry of Health on environmental, safety and social aspects.

UNOPS

The HSCRM will contract United Nations Operation for Project Services (UNOPS) to support project activities. UNOPs will be engaged to procure and provide medical equipment, consumables and other laboratory and medical supplies. All UNOPS activities are expected to comply with the Project's environmental and social safeguards documents³.

Construction Contractors

Contractor(s) will be contractually required to comply with the projects safeguards documents, including implementation of all mitigation measures and the LMP. Contractor(s) will be expected to disseminate and create awareness within their workforce of environmental and social safeguards compliance, and undertake any staff training necessary for their effective implementation. Where contractors do not have existing environmental staff, the Safeguards Specialist/s within the HSCRM will arrange for adequate capacity building within the contractors workforce.

Contractor(s) will also be required to prepare and comply with waste management plans and construction health and safety plans 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 maintaining the health and safety of all personnel authorized to enter and or work on the site. These requirements will be specified in the bidding documents for construction contractors.

³ ESMF, LMP, SEP, IP&WMP

Public Health Laboratory

At the Public Health Laboratory, the Deputy Director General of Public Health should formally appoint the Principal Laboratory Officer as 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 control and waste management and would ensure that health care waste management activities are being carried out in accordance with the IPC&WMP. This person/team would also manage, coordinate and regularly review the performance of the facility in terms of how the waste streams in the Public Health Laboratory are separated, tracked and recorded, and oversee the procedures for the safe transportation of potentially infectious material.

World Bank Safeguards Specialists

The Bank's Environmental and Social team will provide regular safeguards compliance support, 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.

9.4 Capacity Building

The E&S Consultant engaged by the HSCRM is likely to be unfamiliar with WB Safeguard Policies and Procedures. Ongoing support may be needed through training and technical assistance to implement the Project safeguards documents and prepare activity safeguard instruments during project implementation. It is expected that enhanced oversight from the Ministry of Finance CTSSU Safeguards Specialist and World Bank Environmental and Social team will be required. Specifically, within 6 months of the Effective Date of the Project, the Project team members will receive training on the Project's safeguard instruments, and the roles and responsibilities of different key agencies in the ESMF implementation. The CTSSU and WB will also maintain a close dialogue with the HSCRM E&S Consultant and ensure implementation support for safeguards and stakeholder engagement when needed. Further capacity assessments during project implementation will identify where training and further capacity building will be needed.

The Samoan health sector has experience in infection prevention and control, health-care waste management, and communication and public awareness for emergencies through other national and partner funded health projects. However, effective implementation of the environmental and safeguards management will require capacity development for those responsible for implementing sub-projects. Training and capacity support of laboratory and waste management personnel during project implementation will be further identified during implementation.

In particular, capacity building and training will be provided to the Ministry of Health staff responsible for operation of the Healthcare Waste Management Facility. This includes training in the collection and handling of waste and operation and maintenance of the incinerator.

Human resource development including training and capacity building for laboratory staff will also be undertaken.

9.5 E&S Risk Management Budget

A budget for the implementation of the ESMF over the 3 year period is outlined in Table 9-1. The budget is broken down into project budget – including component 3 operation costs and cost-share

arrangement with other World Bank financed projects and government in-kind budget. Costs include the E&S specialist/staff, training and capacity building, and consultation and supervision.

- The E&S Consultant will be financed through the Samoa Health System Strengthening Program (P164382) and will provide E&S support to both projects. The CTSSU Safeguards Specialist is financed through the Samoa Climate Resilient Transport Project (P165782). The MOH will formalise secondments (20% time) of the Healthcare Waste Principal Officer and Principal Lab Officer to the project.
- The E&S Consultant and CTSSU Safeguards Specialist will lead ESMF training and capacity building initiatives. A small budget has been included to cover operational costs. Technical training on E&S related aspects such as infection prevention and control and waste management will be covered under component 1 and 2 activities.
- Consultation, supervision, monitoring and reporting activities will be completed by the assigned E&S Specialists/Staff. A small budget has been included to cover travel, communication materials and other consumable expenses.

Table 9-1 ESMF implementation costs

E&S risk management resource	World Bank Financed Project Budget (USD)	Government In-Kind (USD)
E&S Specialists/Staff		
<i>E&S Consultant (50%)</i>	25,000*	
<i>Healthcare Waste Principal Officer (20% time)</i>		9,000
<i>Principal Laboratory Officer (20% time)</i>		9,000
<i>CTSSU Safeguards Specialist (20% time)</i>	30,000**	
ESMF Training and capacity building^ (training to be run by the CTSSU Safeguards Specialist and E&S Consultant)	3,000	
Consultation, supervision, monitoring, and reporting (covers the cost of travel, comms materials, and other consumable expenses)	15,000	
TOTAL	73,000	18,000

*financed by the Samoa Health System Strengthening Program (P164382)

** financed by the Samoa Climate Resilient Transport Project (P165782)

^ ESMF training only. Technical training with E&S aspects covered under components 1 and 2

10 Annexes

Annex I. Abbreviations and Acronyms

COEP	Code of Environmental Practice
COVID-19	Coronavirus Disease 2019
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESHS	Environmental, Social, Health and Safety
EHS	Environmental, Health and Safety
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GBV	Gender Based Violence
GM	Grievance Mechanism
IPC&WMP	Infection Prevention Control and Waste Management Plan
IPC	Infection and Prevention Control
NEOC	Emergency Operating Centre
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
TA	Technical Assistance
TB	Tuberculosis
WB	World Bank
WHO	World Health Organization

Annex II. Technical Specifications for Procurement of Healthcare Waste Incinerator

1. Incinerator must Incorporate:

Incinerator Overview

- The incinerator shall be of high quality and heavy-duty construction and of a design proven to be capable of achieving a 10 year plus working life in a severe operating environment.
- The incinerator is to be of the two-chamber design consisting of a cylindrical primary combustion chamber and a vertical cylindrical secondary combustion chamber.
- The incinerator shall be of designed and equipped with automatic controls to permit controlled air mode of operation.
- The incinerator is to be equipped a vertical freestanding discharge stack designed to withstand the severe weather events common throughout the South Pacific region.
- The incinerator must be designed and the waste operators trained to ensure that wastes can be loaded and the incinerator operated in a safe manner in the absence of smoke or odorous emissions.

Specifics

Primary Combustion Chamber

- The primary combustion chamber shall be of cylindrical shape, orientated horizontally and designed for optimal heat distribution avoiding cold spots and also providing liquid retention.
- The primary chamber shall be equipped with either a full opening door or alternatively a main loading door of minimum size 600mm x600mm and an additional smaller door for ash removal purposes.
- The primary chamber shall be equipped with a diesel-fired burner operated on an ON/OFF or Hi/Low/Off basis and sized to ignite the waste materials and maintain the Primary Chamber at the proposed operating temperature. The control of the primary chamber burner shall be optimised to minimise diesel fuel consumption.
- The primary chamber shall be equipped with an independent primary combustion air fan. The use of a common combustion air fan for both primary and secondary chambers or the setting of the burner air fan to excess air conditions in order to provide waste combustion air is not acceptable.
- The primary combustion air fan, which shall be sized and controlled to modulate the quantity of air, provided to the primary chamber in accordance with the combustion process and the requirement to maintain controlled air conditions.
- The primary chamber shall be designed so that all combustion air holes are located in a position that prevents seepage of waste liquids into the air holes and subsequently the combustion air system.
- The incinerator primary chamber shall be designed so that all combustion air entry holes can be adequately cleaned from outside the incinerator without the need for maintenance staff to work from inside the primary chamber.

- In accordance with the requirement of heavy-duty construction and long working life we would expect the primary chamber to be manufactured from minimum 5mm thick plate.
- The primary chamber shall be designed and equipped with a suitable refractory lining designed to provide a long working life, minimal heat losses, safe steel contact temperatures and the ability to be replaced, maintained and repaired on site in the absence of skilled refractory tradespeople.

The use of a refractory lining consisting of pre-fired firebricks and insulating board as opposed to a cast or gunned monolithic primary chamber lining shall be considered favourably.

Secondary Combustion Chamber

- The secondary combustion chamber shall be of cylindrical shape and orientated vertically.
- The secondary chamber is to be equipped with a diesel fired Secondary Burner that shall be operated on either a Hi/Low or fully modulating basis. This burner shall be sized to achieve the specified secondary chamber operating temperature prior to the incineration of wastes materials and subsequently maintain this operating temperature once the incineration of wastes has commenced and throughout the incineration burn cycle.
- The secondary chamber shall also be equipped with a secondary combustion air fan and air injection system designed to introduce excess combustion air to the secondary chamber. The air injection system shall be designed in a manner which ensures good mixing of the combustion air and the primary chamber exhaust gases resulting in a high overall combustion efficiency with no visible or odorous emissions from the incinerator during normal operations.
- The secondary combustion chamber shall be designed to provide a retention time of 2.0 seconds at the temperature and Oxygen Concentrations expected within the secondary chamber during normal operations. The vendor shall specify the volume of the proposed secondary combustion chamber and shall provide a detailed arrangement drawing so that the secondary chamber retention time can be verified during the vendor selection process.
- Like the primary combustion chamber, the secondary chamber must be of high quality and heavy-duty construction designed to provide a trouble-free working life over many years. We would expect that the secondary chamber would consist cylindrical sections bolted together. Typical minimum thicknesses should be in the order of 5mm for the main plates and 12mm thick for flanged connections.
- Similarly, to the primary chamber the incinerator secondary combustion chamber lining must be designed to provide a long working life. The use of pre-fired firebricks and insulating board will again be considered favourably however the use of cast refractory structure is suitable particularly for the secondary combustion air entry zone.

Incinerator Discharge Stack

- The incinerator shall be equipped with an incinerator discharge stack of minimum height 8.0 metres above ground level.
- The incinerator discharge stack shall be designed to be mounted directly to the incinerator chambers and be of sufficient strength to withstand the most severe weather conditions.
- If a stainless-steel discharge stack is to be utilised some form of forced or passive cooling must be provided to cool the secondary chamber exhaust gases to a suitable temperature before

entry into the stainless-steel stack. It is not acceptable to mount a stainless-steel stack directly to the secondary combustion chamber.

Painting and Surface Treatment

- All external mild steel surfaces of the primary chamber, secondary chamber and all other mild steel brackets and components shall be suitably painted and protected for the severe corrosive conditions associated with the South Pacific coastal environment.

Typical paint systems consist of sand blasting to an approved national or international standard followed by two coats of inorganic primer followed by two additional coats of a suitable high temperature enamel paint. The vendor must provide details of the proposed steel treatment and paint specifications.

Primary and Secondary Burner and Fuel Tank System

- The primary and secondary chamber burners selected must be sourced from a prominent manufacturer and models utilised available to be purchased by the public. Special OEM models that can only be sourced through the OEM are not permitted.
- Both Primary Chamber and Secondary Chamber burners are to be equipped with an inlet fuel filter and a discharge oil pressure gauge.
- Both the Primary Chamber and Secondary Chamber burners are to be equipped with capillary type thermostat/heat switch to automatically activate the burner fan when the burner temperature exceeds 60 Degrees Celsius.
- The incinerator shall be supplied with a diesel fuel tank of minimum 800 Litre capacity. The tank shall be elevated to a minimum of 800mm above ground level and fabricated from mild steel to suitable international standards for the storage of diesel fuel. The fuel tank and support stand shall be sandblasted and painted using a paint system acceptable for use in a coastal or marine environment.
- The diesel fuel tank must be fitted with a visible level detection device and have a separate tank outlets, with isolation valves, for both the primary and secondary chamber burners.
- The primary and secondary chamber burners shall be configured utilising a two-pipe system however a common return line back to the tank is acceptable. The use of a single pipe system is not acceptable. All piping and fittings shall be of rigid copper or stainless steel with flexible lines permitted for use only as an immediate connection to the burner.

Control Panel

- The incinerator control system shall be designed to ensure that the incinerator is simple to operate and user-friendly.
- The incinerator shall be equipped with a programmable logic controller and shall utilise a fully automatic operating sequence once a trained operator has initiated the incineration burn cycle.
- Site commissioning shall ensure that the incinerator control system is configured to provide economical operation in an environmentally sound manner.
- The incinerator control system shall be housed in a stainless-steel dustproof and weatherproof electrical control panel of minimum IP65 specification. Any switches, buttons, controllers or display screens necessitating a hole cut out in the control panel must also be rated to IP65.

- The controls typically consist of the following:
 - Programmable logic controller.
 - Indicating temperature controller for primary chamber.
 - Indicating temperature controller for secondary chamber.
 - Main isolating switch, control switch and cycle start/stop buttons.
 - All necessary motor starters, overloads, variable speed drives and timers for the nominated operating sequence.
 - Indicator lights to show:
 - Primary combustion air fan in operation
 - Secondary combustion air fan in operation
 - Secondary burner operating
 - Secondary burner flame failure
 - Primary burners operating
 - Primary burners flame failure
- A display HMI screen is an acceptable alternative to the panel mounted temperature controllers and indicator lights.

Accessories to be supplied with Incinerator

Incinerator Ash Container

- The incinerator shall be provided with a stainless-steel ash container, complete with carry handles, of sufficient capacity to handle the ashes generated over a maximum daily burn time of 8 hours.

Incinerator Raking and Clean Out Tools

- The incinerator shall be provided with a stainless-steel rake and incinerator ash clean tool.

Incinerator Primary Chamber Combustion Air Holes Cleanout Tool

- The incinerator shall be provided with a stainless-steel primary chamber combustion air hole cleanout tool. This tool should permit cleaning of the combustion air holes from outside the primary combustion chamber.

Incinerator Spare parts

The following spare parts are to be provided with the incinerator.

Primary & Secondary Burners Parts

- | | |
|--|-------------------|
| • Oil Nozzles | 2 Sets per Burner |
| • Oil Valve, Oil Pump & Coupling | 1 Set per Burner |
| • Diffuser & Blast Tube | 1 Set per Burner |
| • Ignition electrodes | 2 Set per Burner |
| • Burner Motor, Capacitor & Fan Impeller | 1 Set per Burner |

Common Burner Parts

- | | |
|---------------------|-------|
| • Burner Controller | 1 Off |
| • Flame sensor | 4 Off |

- Burner Heat Switch 2 Off
- Temperature Controller, if used 1 Off

Thermocouples

- Primary Chamber Thermocouple 2 Off
- Secondary Chamber Thermocouple 1 Off

Door Sealing Ceramic Rope & Gaskets 1 Set

The Vendor shall provide the cost of the following optional spare parts

- Replacement PLC, preinstalled with operating program
- Replacement PLC power supply
- Replacement HMI screen, preinstalled with operating program, if utilised
- Set on one off any relays and timers used in the control panel
- Set of one off each size of VSD used in the control panel

Provision of PPE

The following PPE are to be provided with the incinerator:

- 3 Sets of Leather gloves and full-face shields

Incinerator Capacity & Burn Rate

The incinerator shall be equipped with a primary combustion chamber of internal volume of 1.5m³.

It is expected that the incinerator will operate on a batch loading system. The incinerator shall be configured to safely permit the operation of two batch burns over an 8-hour day. Combustion ash residues must be no more than 5%, weigh basis, of wastes incinerated.

The vendor shall specify the proposed incinerator capacity based on the incineration of clinical wastes of a nominated calorific value of 16MJ/KG and a density of 100kg/m³.

Based on the vendor nominated burn rate the secondary chamber must be sized to achieve a retention time of 2.0 seconds at an operating temperature of 1100°C.

Retention times shall be based on calculated actual exhaust gas flows within the secondary combustion chamber and not flows corrected for temperature or referenced to Oxygen. Full details of the secondary sizing, including arrangement drawings must be provided.

Incinerator Data Sheet

The vendor must complete the attached Incinerator Data Sheet Form that is provided as an Excel spreadsheet. Failure to complete this form will result in the inability to assess the vendors bid and therefore result in the exclusion of this bid from the tender process.

All information presented in this Incinerator Data Sheet Form is binding and any unapproved changes from this form will be considered non-compliance of the project contractual requirements.

2. Other Specifications

- Details must be provided stipulating on site requirements and include dimensions of concrete pads required and minimum distances from buildings needed for safe operations.
- European Certificate or ISO 9001 certificate(s) for the equipment of the manufacturer(s) issued by any member of the International Quality Certification Network or by other equivalent or higher qualified organisation for quality certification is preferred. Specialist organisations with a proven record of accomplishment in the field of incineration and without formal certification will also be considered.
- Two full set of documents must be supplied including user's manual, trouble- shooting guidelines, spare parts list (in English), as hard and soft copies (electronic).

3. Defect Liability Period and Review

The contractor shall guarantee materials will be available for the works of this contract for a period of [twelve (12) calendar months] from practical completion. Contractor warranties and guarantees shall be extended and paid for by the contractor (where they may have otherwise expired) to fulfil this obligation. The Defects Liability Works shall include “Repair” or “Replacement” of faulty components.

Annex III. Chance Finds Procedure

Cultural heritage includes tangible or intangible heritage with archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance. Tangible heritage items they may be encountered during implementation include moveable or immovable objects, sites, structures, groups of structures, natural feature and landscapes.

The list of negative activity attributes which would make an activity ineligible for support includes any activity that would adversely impact cultural property. In the event that during reconstruction or construction sites of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artifacts 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 MNRE take over;
- (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the MNRE;
- (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 property mitigation, management, and activities.

1. Introduction

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. On March 12, 2020 WHO characterized COVID-19 as a pandemic, and as of May 12, 2020 Samoa has no confirmed COVID-19 cases. However, given the pandemic character of COVID-19 and the country's sensitivity, geographic isolation and logistical challenges and low capacity to contain epidemic outbreaks (as seen during the initial response to the recent measles epidemic in 2019), the Government of Samoa declared a State of Emergency on March 20, 2020.

The World Bank has established a dedicated, fast-track facility for the COVID-19 response with the objective of strengthening developing nations' ability to respond to the COVID-19 pandemic and shortening the time to economic and social recovery. The Government of Samoa is seeking US\$2.9 million in funding from the World Bank for the COVID-19 Emergency Responses Project (the Project) from the Fast Track Covid-19 Response Program.

The Project aims to support Samoa's response to the COVID-19 outbreak and to build country's pandemic preparedness by improving emergency preparedness and response, strengthening essential health service delivery and managing implementation and monitoring & evaluation. This emergency project will be implemented throughout Samoa with a focus on the main islands of Upolu and Savai'i. It will predominately contribute to i) strengthening emergency response for COVID-19 and ii) systems strengthening for future pandemic preparedness and response. Project activities will include enhancement of laboratory capacity and provision of medical and laboratory equipment and supplies; establishment of necessary healthcare waste management capacity; strengthening surveillance system; with the strong focus on training (including for infection control and health care waste management) to ensure compliance with this Infection Prevention Control and Waste Management Plan (IPC&WMP), WHO guidance and GIIP. The project will also provide limited support for existing risk communication and community engagement activities already being implemented by MOH and UNICEF.

1.1 Scope of the IPC&WMP

Infection control and waste management has been identified as a key risk associated with the Project. Workers in health-care facilities are particularly vulnerable to contagions like COVID-19. This IPC&WMP contains detailed procedures, based on World Health Organization (WHO) guidance, for protocols necessary for treating patients and handling medical waste as well as environmental health and safety guidelines for health-care staff, including the necessary PPE. Proper storage and disposal of medical wastes and disinfectant protocols are also included.

The IPC&WMP will apply to all facilities funded under the Project including laboratories, medical centers, and isolation centers as well as any community outreach programmes.

1.2 Supported facilities

Sub-Component 1.2: Infection prevention and control - will focus on infection prevention and control, which is critical for preventing the spread of any infectious diseases. Immediate support will

be provided to enhance infection control in both health facilities and isolation facilities. An incinerator and trucks to transport medical wastes will be procured and provided to Savai'i. Sub-Component 2.2: Establishment of public health laboratory for human and animal health - will strengthen Samoa's diagnostic capacity for testing COVID-19 and other infectious diseases. This sub-component will aim to address this bottleneck through providing support to establish a public health laboratory (for both human health and animal health) and to finance the needed civil works, procurement of essential laboratory equipment, reagents, consumables and supplies. Protocols and biosafety regulations will be developed following WHO standards.

2. Infection Prevention and Control

2.1 Introduction

Infection Prevention and Control (IPC) is a practical, evidence-based approach preventing patients and health-care workers from being harmed by avoidable infections and hospital outbreaks. IPC measures apply to all stages of patient care whether in-patients, out-patients, at health stations and in outreach programmes. IPC is also used to protect workers involved in waste management, workers transporting laboratory specimens, and ambulance workers. This section describes the IPC strategies that should be undertaken by health-care workers in the context of the Project.

2.2 COVID-19 Transmission Routes

The main routes of transmission of COVID-19 are respiratory droplets and direct contact. Any person who is in close contact with an infected individual is at risk of being exposed to potentially infective respiratory droplets. Droplets may also land on surfaces where the virus could remain viable; thus, the immediate environment of an infected individual can serve as a source of transmission.ⁱ Based on the available evidence, WHO recommends droplet and contact precautions for those people caring for COVID-19 patients. WHO continues to recommend airborne precautions for circumstances and settings in which aerosol generating procedures and support treatment are performed, according to risk assessment.ⁱⁱ

2.3 IPC Strategies

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

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

2.3.1 Ensuring Triage, Early Recognition, and Source Control.

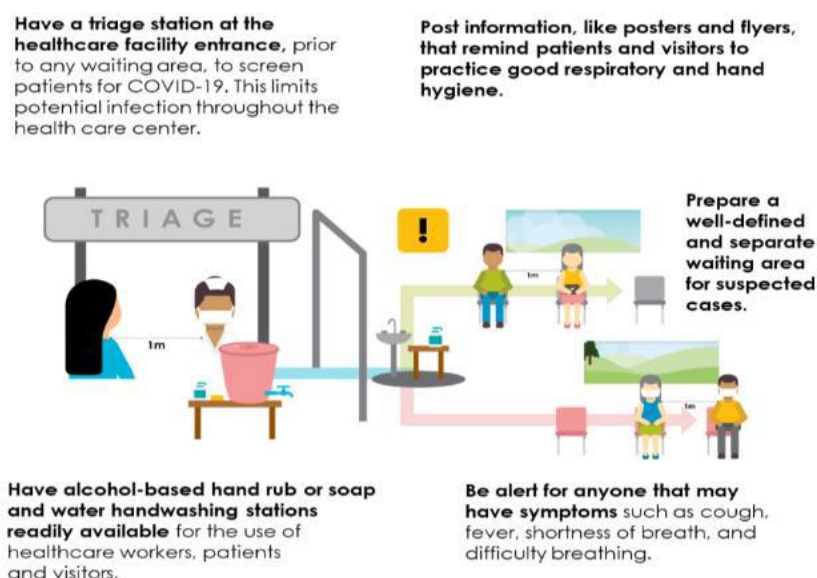
Clinical triage includes a system for assessing all patients at admission, allowing for early recognition of possible COVID-19 and immediate isolation of patients with suspected disease in an area separate from other patients (source control).

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

- Encourage health care workers (HCW) to have a high level of clinical suspicion;

- Establish a well-equipped triage station at the entrance to the facility, supported by trained staff;
- Institute the use of screening questionnaires according to the updated case definition. Please refer to the WHO Global Surveillance for human infection with coronavirus disease (COVID-19)ⁱⁱⁱ for case definitions; and
- Post signs in public areas reminding symptomatic patients to alert HCWs.

Figure 3 Triage station⁴



2.3.2 Applying Standard Precautions for all Patients

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

Respiratory hygiene

Ensure that the following respiratory hygiene measures are used:

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

Hand hygiene

Hand hygiene is extremely important to prevent the spread of the COVID-19 virus. All health-care facilities should establish hand hygiene programmes, if they do not have them already, or strengthen existing ones. In addition, rapid activities to prevent the spread of the COVID-19 virus are needed, such as procurement of adequate quantities of hand hygiene supplies; hand hygiene refresher

⁴ Source: Samoa Emergency Preparedness and Response Plan Coronavirus disease 2019 (COVID 2019); Version 18 – as of 21 March 2020, P21

courses and communications campaigns. Cleaning hands using an alcohol-based hand rub or with water and soap should be done according to the instructions known as “My 5 moments for hand hygiene”^{iv}. These are:

1. Before touching a patient;
2. Before clean/aseptic procedures;
3. After body fluid exposure/risk;
4. After touching a patient; and
5. After touching patient surroundings.

If hands are not visibly dirty, the preferred method is using an alcohol-based hand rub for 20–30 seconds using the appropriate technique. When hands are visibly dirty, they should be washed with soap and water for 40–60 seconds using the appropriate technique. If soap or alcohol-based hand rub is not available, using chlorinated water (0.05%) for handwashing is an option but requires care to avoid causing dermatitis (See Attachment 1 for WHO hand cleaning and hand rub posters).

In addition to performing hand hygiene at all five moments, it should be performed in the following situations:

- Before putting on PPE and after removing it;
- When changing gloves; after any contact with a patient with suspected or confirmed COVID-19 infection, their waste or the environment in that patient’s immediate surroundings; and
- After contact with any respiratory secretions; before food preparation and eating; and after using the toilet.

Functional hand hygiene facilities should be present for all health-care workers at all points of care, in areas where PPE is put on or taken off, and where health-care waste is handled. In addition, functional hand hygiene facilities should be available for all patients, family members and visitors, and should be available within 5m of toilets, as well as at the entry/exit of the facility, in waiting rooms and other public areas.

An effective alcohol-based hand rub product should contain between 60% and 80% of alcohol and its efficacy should be proven according to the European Norm 1500 or the standards of the ASTM International (formerly, the American Society for Testing and Materials) known as ASTM E-1174. These products can be purchased on the market, but can also be produced locally in pharmacies using the formula and instructions provided by WHO^v

Patient-care equipment cleaning and disinfection procedures

All medical devices are either single-use or reusable ones. Single-use equipment must be discarded, while all reusable equipment must be properly processed between use and between patients, to prevent infections. For proper reprocessing of equipment, all items need to be cleaned with detergent (liquid soap) and water before disinfection and sterilization, to get rid of the organic matter e.g. blood and mucus that may neutralize chemical disinfectant and affecting the efficiency of the disinfectant.

Instruments and other items may be classified based on the risk of transmitting infection into critical, semi-critical or non-critical, depending on the sites.

Figure 4: Equipment cleaning classification

Category	Application	Type of processing	Example of items
Critical	Sterile tissues or the blood system	Sterilization (by heat or chemicals)	Dressing and suture instruments, surgical instruments, delivery sets, diagnostic catheters, dental instruments, bronchoscopes, cystoscopes, etc.
Semi-critical	Mucous membranes or non-intact skin	High-level disinfection (HLD) & intermediate level disinfection	Laryngoscope blades, vaginal specula, instruments for MVA, respiratory therapy and anaesthesia equipment. dental impressions, endoscopes, gastroscopes, etc.
Non-critical	Intact skin	Cleaning, low level Disinfection (depending on contact with the type of patient)	bedpans, toilets, urinals, blood pressure cuffs, ECG leads, thermometers, stethoscopes, beds, bedside tables

Patient-care equipment cleaning procedure

- Prepare all cleaning and disinfecting equipment and solution
- Cleaner wear PPE: rubber gloves and boots, impermeable apron. when there is a risk of splash in the face, staff must wear eyes protection and surgical mask.
- Take off any gross soiling on the instrument by rinsing in clean water
- Take instrument apart – fully and immerse all parts in detergent solution, and clean all channels and bores of the instrument
- Ensure all visible soil is take off from the instrument – follow manufacturers' instructions,
- Rinse thoroughly with clean water
- Dry the instrument (let it dry to– on a clean rack or hang if tubing or items with lumens, away from other dirty items)
- Inspect to ensure the instrument is cleaned

Patient-care equipment disinfecting procedure

- Prepare disinfectant solution according to the volume of medical instruments, following notice of disinfectant, cleaner wearing PPE.
- Immerse the cleaned equipment completely in the disinfectant solution. Soak in the solution, duration will depend on the disinfectant recommendations and dilutions. For example: Sodium hypochlorite 0.05%: soak during 30 minutes
- Rinse thoroughly with clear or sterile water (depending on the required level of disinfection and the use of the equipment)

- Sterile water for semi-critical instrument (HLD)
- Clean water for non-critical instrument (low level of disinfectant)
- Let it dry (on a rack)
- Pack the disinfected equipment and store in a clean area

Prevention of needle-stick/sharp injuries

In healthcare settings, injuries from needles or other sharp instruments are the number-one cause of occupational exposure to blood-borne infections. All staff that come in contact with sharps - from doctors and nurses to those who dispose of the trash - are at risk of infections. Improper disposal of sharps also poses a great threat to members of the community.

The term sharps refers to any sharp instrument or object used in the delivery of healthcare services - including hypodermic needles, suture needles, scalpel blades, sharp instruments, intravenous (IV) catheters, and razor blades. Needle stick/sharp injury means the skin is accidentally punctured by a used needle/ sharp (e.g. scalpel). The injury is a port of entry for blood-borne diseases, such as hepatitis B (HBV) and hepatitis C (HCV), HIV etc. Exposure to patient's body fluid also put HCWs at risk of infection. Therefore, they are encouraged to strictly comply with IPC precautions related to body fluid.

The main causes of needle stick/sharp injury include:

- Recapping of needles (identified as the most common cause)
- Unsafe handling of sharp waste (identified as the second most common cause)
- Reuse of safety box
- Manipulation of used sharps (bending, breaking, or cutting needles).
- Unnecessary injections
- Lack of supplies: disposable syringes, sharps-disposal container/safety box
- Failure to place needles in sharps containers immediately after injection
- Passing sharps from hand to hand (e.g. during surgery)
- Lack of management of sharp wastes
- Lack of awareness of the problem
- Lack of training for staff

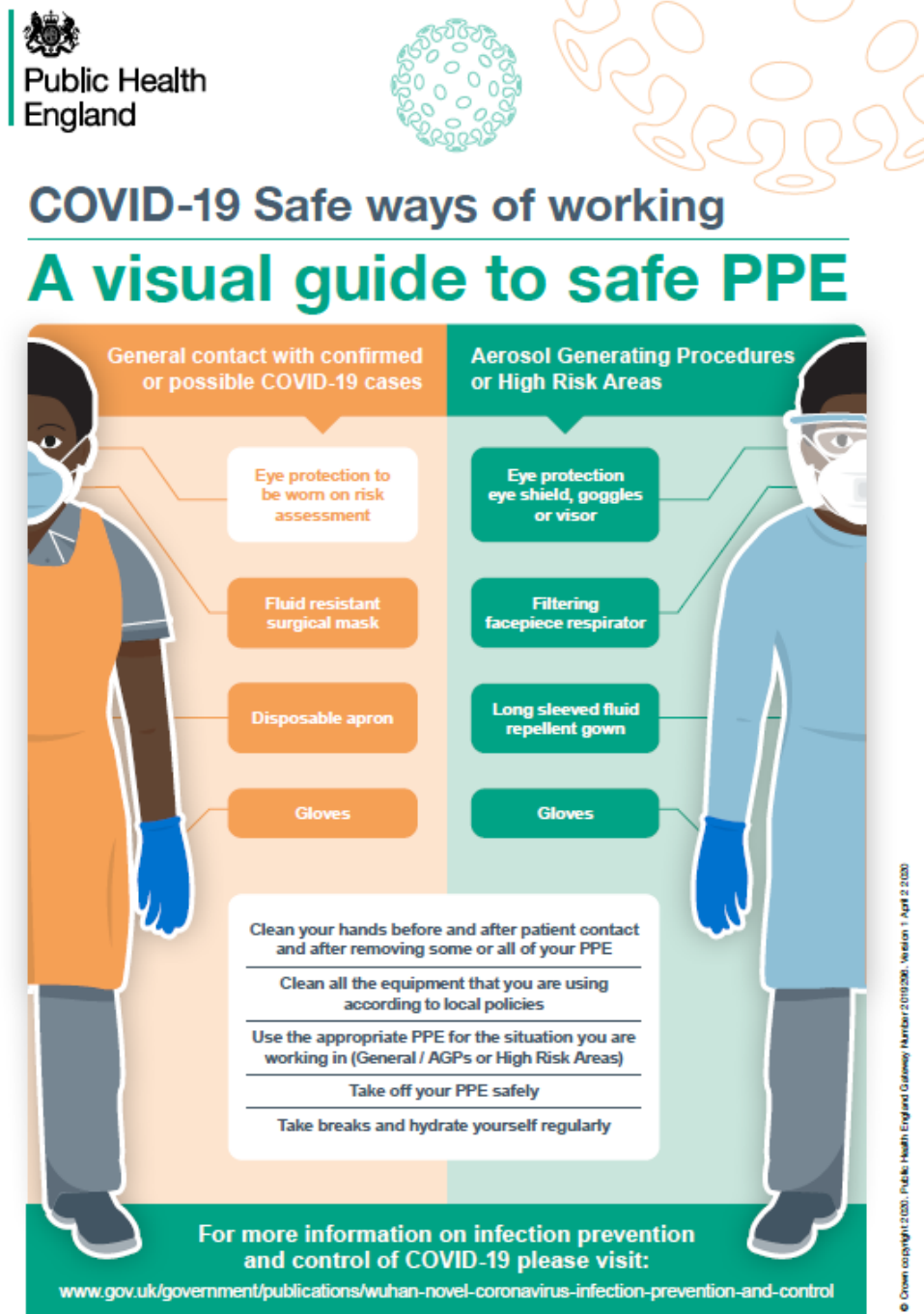
Principle of the disposal of used needles/sharps:

- Never recap needle/sharp
- Dispose of needles and syringes immediately after use in the safety box.
- Close the safety box, whenever the containers become $\frac{3}{4}$ full.
- Safely dispose the safety box (e.g. via incinerator with temperature at least of 800o Celsius)
- When it is not immediately disposed, keep safety boxes in appropriate storage, for infectious waste.

Personal Protective Equipment (PPE)

Personal Protective Equipment or PPE consists of equipment and clothing to protect health care workers and patients from infected droplets, surfaces and from aerosol generating procedures. In the context of COVID-19 this includes medical gowns, masks, gloves, goggles and or face shields. The diagram below shows a visual guide to safe PPE^{vi}.

Figure 5 A visual guide to safe PPE



It is essential that Health-care Workers are trained on the correct use, wear, doffing and disposal of PPE including gloves, gowns, facemasks, eye protection and respirators (if available) and check they understand. Annex 2 provides pictorial instructions for the correct steps for donning (putting on) and doffing (safe removal) of PPE for health-care settings.

The type of PPE used when caring for people with COVID-19 will vary according to the setting, type of personnel and activity. Health-care workers involved in the direct care of patients should use gowns, gloves, medical masks and eye protection (goggles, face shields). Table 1 is provided below outlining appropriate PPE for different health care settings.

Table 2: Recommended personal protective equipment (PPE) for use in the context of COVID-19, according to the setting, personnel and type of activity^{vii}

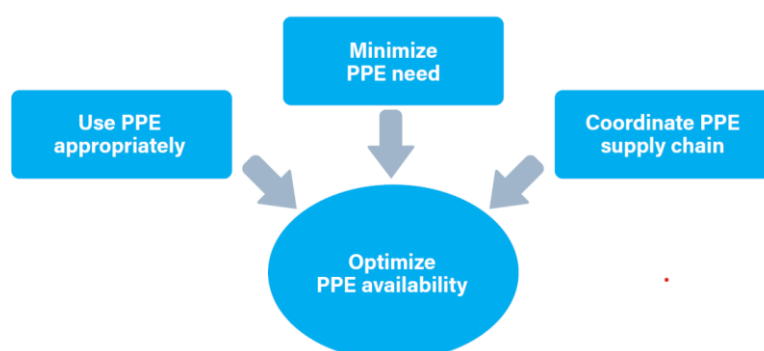
Setting	Target staff or patient	Activity	Type of PPE or procedure
Health-care facilities			
Inpatient facilities			
Patient's room	Health-care workers	Providing direct care to patients with SARI	Medical mask, gown, gloves, eye protection (goggles or face shield)
		Aerosol-generating procedures performed on patients with SARI	Respirator N95 or FFP2 standard or equivalent, gown, gloves, eye protection, apron
	Cleaners	Entering patient's room	Medical mask, gown, heavy-duty gloves, eye protection (if risk of splash from organic material or chemicals), boots or closed work shoes
	Visitors	Entering patient's room	Medical mask, gown, gloves
Other areas of patient transit (e.g. wards, corridors)	All staff, including health-care workers	Any activity that does not involve contact with patients	No PPE required
Triage	Health-care workers	Any	Maintain distance of at least 2 m
	Patients with respiratory symptoms	Any	Provide medical mask if tolerated by patient
Laboratory	Laboratory technicians	Manipulation of respiratory samples	Medical mask, gown, gloves, eye protection (if risk of splash)
Administrative areas	All staff, including health-care workers	Administrative tasks that do not involve contact with patients	No PPE required
Outpatient facilities			
Consultation room	Health-care workers	Physical examination of patients with respiratory symptoms	Medical mask, gown, gloves, eye protection
	Health-care workers	Physical examination of patients without respiratory symptoms	PPE according to standard precautions and risk assessment
	Patients with respiratory symptoms	Any	Provide medical mask if tolerated
	Patients without respiratory symptoms	Any	Provide medical mask if tolerated
	Cleaners	After and between consultations with patients with respiratory symptoms	Medical mask, gown, heavy-duty gloves, eye protection (if risk of splash from organic material or chemicals), boots or closed work shoes
Waiting room	Patients with respiratory symptoms	Any	Provide medical mask if tolerated; immediately move patient to isolation room or separate area away from others; if this is not feasible, ensure distance of at least 2 m from other patients
	Patients without respiratory symptoms	Any	Provide medical mask if tolerated
Administrative areas	All staff, including health-care workers	Administrative tasks	No PPE required
Triage	Health-care workers	Preliminary screening not involving direct contact	Maintain distance of at least 1 m; no PPE required
	Patients with respiratory symptoms	Any	Maintain distance of at least 1 m; provide medical mask if tolerated
	Patients without respiratory symptoms	Any	No PPE required

SARI, severe acute respiratory infection.

¹ The number of visitors should be restricted. If visitors must enter a patient's room, they should be provided with clear instructions about how to put on and remove PPE and about performing hand hygiene before putting on and after removing PPE; this should be supervised by a health-care worker.

The protection of frontline health workers is paramount and PPE, including medical masks, respirators, gloves, gowns, and eye protection, must be prioritized for health-care workers and others caring for COVID-19 patients. In view of the global PPE shortage, strategies that can facilitate optimal PPE availability include minimizing the need for PPE in health care settings, ensuring rational and appropriate use of PPE, and coordinating PPE supply chain management mechanisms (Figure 4).

Figure 6 Strategies to optimize the availability of personal protective equipment (PPE)



Source: Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19). Geneva: World Health Organization; 2020.

Strategies to optimise the availability of PPE

The following interventions can minimize the need for PPE while protecting health-care workers and other people from exposure to the infection in health-care settings:

- Use physical barriers to reduce exposure to the virus, such as glass or plastic windows. This approach can be implemented in areas where patients first present, such as triage areas or the registration desk at the emergency department.
- Restrict health-care workers from entering the rooms of patients with COVID-19 if they are not involved in direct care. Consider bundling activities to minimize the number of times a room is entered (e.g. check vital signs during medication administration; have food delivered by health-care workers while they perform other care), and plan which activities will be performed at the bedside.
- Ideally visitors should not be allowed. If this is not possible, restrict the number of visitors to areas where patients with COVID-19 are being isolated; restrict the amount of time visitors are allowed to spend in the area; and provide clear instructions about how to put on and remove PPE and perform hand hygiene to ensure visitors avoid self-contamination).
- PPE should be based on the risk of exposure (e.g. type of activity) and the transmission dynamics of the pathogen (e.g. contact, droplet, aerosol). The overuse of PPE has a further impact on supply shortages, as well as increasing waste. Observing the following recommendations will ensure the use of PPE is rationalized.
- Respirators (N95, FFP2 or equivalent standard) have been used for an extended time during previous public health emergencies involving acute respiratory illness when PPE was in short supply. This refers to wearing the same respirator while caring for multiple patients with the same diagnosis without removing the respirator. Evidence indicates that respirators maintain their protection when used for extended periods. However, using the same respirator for more than four hours can lead to discomfort and should be avoided.^{viii}

In some areas access to PPE may be limited or delayed, CDC has suggested measures, described below, that may be adopted in these circumstances. **However, in some cases they cannot be considered PPE as their capability to protect HCW is unknown or has not been evaluated.**

Strategies to optimise the supply of PPE and equipment

1. Strategies for Extended Use of Eye Protection.

Extended use of eye protection is the practice of wearing the same eye protection for repeated close contact encounters with several different patients, without removing eye protection between patient encounters. Extended use of eye protection can be applied to disposable and reusable devices.

- Eye protection should be removed and reprocessed if it becomes visibly soiled or difficult to see through.
- If a disposable face shield is reprocessed, it should be dedicated to one HCW and reprocessed whenever it is visibly soiled or removed (e.g., when leaving the isolation area) prior to putting it back on. See protocol for removing and reprocessing eye protection below.
- Eye protection should be discarded if damaged (e.g., face shield can no longer fasten securely to the provider, if visibility is obscured and reprocessing does not restore visibility).
- HCW should take care not to touch their eye protection. If they touch or adjust their eye protection, they must immediately perform hand hygiene.
- HCW should leave patient care area if they need to remove their eye protection. See protocol for removing and reprocessing eye protection below.

Use eye protection devices beyond the manufacturer-designated shelf life during patient care activities.

- If there is no date available on the eye protection device label or packaging, facilities should contact the manufacturer. The user should visually inspect the product prior to use and, if there are concerns (such as degraded materials), discard the product.

Prioritize eye protection for selected activities such as:

- During care activities where splashes and sprays are anticipated, which typically includes aerosol generating procedures.
- During activities where prolonged face-to-face or close contact with a potentially infectious patient is unavoidable.

Selected Options for Reprocessing Eye Protection:

Adhere to recommended manufacturer instructions for cleaning and disinfection.

When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider protocol as follows:

- While wearing gloves, carefully wipe the *inside, followed by the outside* of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
- Carefully wipe the *outside* of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
- Wipe the outside of face shield or goggles with clean water or alcohol to remove residue.
- Fully dry (air dry or use clean absorbent towels).
- Remove gloves and perform hand hygiene.

2. Strategies for Optimizing the Supply of Isolation Gowns:

Implementing extended use of isolation gowns^x.

- Consideration can be made to extend the use of isolation gowns (disposable or cloth) such that the same gown is worn by the same HCW when interacting with more than one patient known to be infected with the same infectious disease when these patients housed in the same location (i.e., COVID-19 patients residing in an isolation cohort). This can be considered only if there are no additional co-infectious diagnoses transmitted by contact among patients. If the gown becomes visibly soiled, it must be removed and discarded as per usual practices.
- Re-use of cloth isolation gowns.
- Disposable gowns are not typically amenable to being doffed and re-used because the ties and fasteners typically break during doffing. Cloth isolation gowns could potentially be untied and retied and could be considered for re-use without laundering in between.
- In a situation where the gown is being used as part of standard precautions to protect HCW from a splash, the risk of re-using a non-visibly soiled cloth isolation gown may be lower. However, for care of patients with suspected or confirmed COVID-19, HCW risk from re-use of cloth isolation gowns without laundering among (1) single HCW caring for multiple patients using one gown or (2) among multiple HCW sharing one gown is unclear. The goal of this strategy is to minimize exposures to HCW and not necessarily prevent transmission between patients. Any gown that becomes visibly soiled during patient care should be disposed of and cleaned.

When No Gowns Are Available

In the situation of severely limited or no available isolation gowns, the following pieces of clothing can be considered as a last resort for care of COVID-19 patients as single use. However, **none of these options can be considered PPE, since their capability to protect HCW is unknown**. Preferable features include long sleeves and closures (snaps, buttons) that can be fastened and secured.

- Disposable laboratory coats.
- Reusable (washable) patient gowns.
- Reusable (washable) laboratory coats.
- Disposable aprons.
- Combinations of clothing: Combinations of pieces of clothing can be considered for activities that may involve body fluids and when there are no gowns available.
- Long sleeve aprons in combination with long sleeve patient gowns or laboratory coats.
- Open back gowns with long sleeve patient gowns or laboratory coats.
- Sleeve covers in combination with aprons and long sleeve patient gowns or laboratory coats.
- Reusable patient gowns and lab coats can be safely laundered according to routine procedures.

Laundry operations and personnel may need to be augmented to facilitate additional washing loads and cycles

Systems are established to routinely inspect, maintain (e.g., mend a small hole in a gown, replace missing fastening ties) and replace reusable gowns when needed (e.g., when they are thin or ripped)

3. Implement limited re-use of facemasks^{xi}.

Limited re-use of facemasks is the practice of using the same facemask by one HCW for multiple encounters with different patients but removing it after each encounter. As it is unknown what the

potential contribution of contact transmission is for SARS-CoV-2, care should be taken to ensure that HCW **do not** touch outer surfaces of the mask during care, and that mask removal and replacement be done in a careful and deliberate manner.

- The facemask should be removed and discarded if soiled, damaged, or hard to breathe through.
- Not all facemasks can be re-used.
- Facemasks that fasten to the provider via ties may not be able to be undone without tearing and should be considered only for extended use, rather than re-use.
- Facemasks with elastic ear hooks may be more suitable for re-use.
- HCW should leave patient care area if they need to remove the facemask. Facemasks should be carefully folded so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage. The folded mask can be stored between uses in a clean sealable paper bag or breathable container.

Prioritize facemasks for selected activities such as:

For provision of essential surgeries and procedures

- During care activities where splashes and sprays are anticipated.
- During activities where prolonged face-to-face or close contact with a potentially infectious patient is unavoidable.
- For performing aerosol generating procedures if respirators are no longer available.

When No Facemasks Are Available, Options Include:

- Use a face shield that covers the entire front (that extends to the chin or below) and sides of the face with no facemask.
- Consider use of expedient patient isolation rooms for risk reduction: Portable fan devices with high-efficiency particulate air (HEPA) filtration that are carefully placed can increase the effective air changes per hour of clean air to the patient room, reducing risk to individuals entering the room without respiratory protection. US National Institute for Occupational Safety and Health (NIOSH) has developed guidance for using portable HEPA filtration systems to create expedient patient isolation rooms. The expedient patient isolation room approach involves establishing a high-ventilation-rate, negative pressure, inner isolation zone that sits within a “clean” larger ventilated zone.
- Consider use of ventilated headboards: NIOSH has developed the ventilated headboard that draws exhaled air from a patient in bed into a HEPA filter, decreasing risk of HCW exposure to patient-generated aerosol. This technology consists of lightweight, sturdy, and adjustable aluminium framing with a retractable plastic canopy. The ventilated headboard can be deployed in combination with HEPA fan/filter units to provide surge isolation capacity within a variety of environments, from traditional patient rooms to triage stations, and emergency medical shelters.
- HCW use of homemade masks: In settings where facemasks are not available, HCW might use homemade masks (e.g., bandana, scarf) for care of patients with COVID-19 as a last resort. **However, homemade masks are not considered PPE since their capability to protect HCW is unknown. Caution should be exercised when considering this option.** Homemade masks should ideally be used in combination with a face shield that covers the entire front (that extends to the chin or below) and sides of the face.

Precautions to be implemented by health-care workers caring for people with suspected or actual COVID-19 include using PPE appropriately. The rational, correct, and consistent use of PPE also helps reduce the spread of pathogens. PPE effectiveness depends strongly on adequate and regular supplies, adequate staff training, appropriate hand hygiene, and appropriate human behaviour^{xii}.

2.3.3 Implementing Empiric Additional Precautions

Contact and droplet precautions

- in addition to using standard precautions, all individuals, including family members, visitors and HCWs, should use contact and droplet precautions before entering the room of suspected or confirmed COVID-19 patients;
- patients should be placed in adequately ventilated single rooms. For general ward rooms with natural ventilation, adequate ventilation is considered to be 60 L/s per patient;
- when single rooms are not available, patients suspected of having COVID-19 should be grouped together;
- all patients' beds should be placed at least 1 metre apart regardless of whether they are suspected to have COVID-19;
- where possible, a team of HCWs should be designated to care exclusively for suspected or confirmed cases to reduce the risk of transmission;
- HCWs should use a medical mask (for specifications, see reference World Health Organization.^{xiii} WHO Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care);
- HCWs should wear eye protection (goggles) or facial protection (face shield) to avoid contamination of mucous membranes;
- HCWs should wear a clean, non-sterile, long-sleeved gown;
- HCWs should also use gloves;
- the use of boots, coverall, and apron is not required during routine care;
- after patient care, appropriate doffing and disposal of all PPE and hand hygiene should be carried out.
- A new set of PPE is needed when care is given to a different patient (for alternatives in case of restricted PPE supplies see above strategies to optimise the availability of PPE);
- equipment should be either single-use and disposable or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect it between use for each individual patient (e.g. by using ethyl alcohol 70%)^{xiv}
(<https://www.who.int/infectionprevention/publications/decontamination/en/>)
- HCWs should refrain from touching eyes, nose, or mouth with potentially contaminated gloved or bare hands.
- avoid moving and transporting patients out of their room or area unless medically necessary. Use designated portable X-ray equipment or other designated diagnostic equipment. If transport is required, use predetermined transport routes to minimize exposure for staff, other patients and visitors, and have the patient wear a medical mask;
- ensure that HCWs who are transporting patients perform hand hygiene and wear appropriate PPE as described in this section;
- notify the area receiving the patient of any necessary precautions as early as possible before the patient's arrival;
- routinely clean and disinfect surfaces with which the patient is in contact;

- limit the number of HCWs, family members, and visitors who are in contact with suspected or confirmed COVID-19 patients; and
- maintain a record of all persons entering a patient's room, including all staff and visitors.

Additional airborne precautions are required for aerosol-generating procedures

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

Ensure that HCWs performing aerosol-generating procedures:

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

2.3.4 Implementing Administrative Controls

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

Administrative measures related to health-care workers.

- provision of adequate training for HCWs;
- ensuring an adequate patient-to-staff ratio;
- establishing a surveillance process for acute respiratory infections potentially caused by COVID-19 virus among HCWs;
- ensuring that HCWs and the public understand the importance of promptly seeking medical care; and
- monitoring HCW compliance with standard precautions and providing mechanisms for improvement as needed.

2.3.5 Using Environmental and Engineering Controls

These controls address the basic infrastructure of the health-care facility and aim to ensure adequate ventilation in all areas in the health-care facility, as well as adequate environmental

cleaning. Additionally, separation of at least 1 metre should be maintained between all patients. Both spatial separation and adequate ventilation can help reduce the spread of many pathogens in the health-care setting. Ensure that cleaning and disinfection procedures are followed consistently and correctly.⁹ Cleaning environmental surfaces with water and detergent and applying commonly used hospital disinfectants (such as sodium hypochlorite) is effective and sufficient. Manage laundry, food service utensils and medical waste in accordance with safe routine procedures.

WASH in healthcare settings

Existing recommendations for water, sanitation and hygiene measures in health care settings are important for providing adequate care for patients and protecting patients, staff, and caregivers from infection risks. The following actions are particularly important: (i) managing excreta (faeces and urine) safely, including ensuring that no one comes into contact with it and that it is treated and disposed of correctly; (ii) engaging in frequent hand hygiene using appropriate techniques; (iii) implementing regular cleaning and disinfection practices; and (iv) safely managing health care.

Waste produced by COVID-19 cases. Other important measures include providing sufficient safe drinking-water to staff, caregivers, and patients; ensuring that personal hygiene can be maintained, including hand hygiene, for patients, staff and caregivers; regularly laundering bedsheets and patients' clothing; providing adequate and accessible toilets (including separate facilities for confirmed and suspected cases of COVID-19 infection); and segregating and safely disposing of health-care waste.^{xvii}

Hand hygiene materials

All facilities should provide hand hygiene stations. Hand hygiene stations can consist of either water, such as sinks attached to a piped-water supply, refillable water reservoir or clean, covered buckets with taps equipped with plain soap or alcohol-based hand rub dispensers where running water is not available. Where alcohol-based hand rub or bar soap is not feasible, a liquid soap solution, mixing detergent with water can be used. The ratio of detergent to water will depend on types and strengths of locally available product. Soap does not need to be antibacterial and evidence indicates that normal soap is effective in inactivating enveloped viruses, such as coronaviruses. Alcohol-based hand rub should contain at least 60% alcohol. Such products should be certified and, where supplies are limited or prohibitively expensive, can be produced locally according to WHO-recommended formulations.

Keeping water supplies safe

The COVID-19 virus has not been detected in drinking water supplies and based on current evidence, the risk to water supplies is low^{xviii} A number of measures can be taken to improve water safety, starting with protecting the source water; treating water at the point of distribution, collection, or consumption; and ensuring that treated water is safely stored at home in regularly cleaned and covered containers.

Water used in health-care facilities should use potable water or a centralized disinfection system where possible. Conventional, centralized water treatment methods that use filtration and disinfection should deactivate the COVID-19 virus. The COVID-19 virus is likely to be more sensitive to chlorine and other oxidant disinfection processes than many other viruses. For effective centralized disinfection, there should be a residual concentration of free chlorine of ≥ 0.5 mg/L after at least 30 minutes of contact time at pH < 8.0 .¹² A chlorine residual should be maintained throughout the distribution system.

Sanitation and plumbing

People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine that has a door that closes to separate it from the patient's room. Flush toilets should operate properly and have functioning drain traps. When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds. If it is not possible to provide separate toilets, the toilet should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (gown, gloves, boots, mask, and a face shield or goggles). Further, and consistent with existing guidance, staff and health care workers should have toilet facilities that are separate from those used by all patients.

WHO recommends the use of standard, well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized faecal matter from entering the plumbing or ventilation system, together with standard wastewater treatment. If facilities are connected to sewers, a risk assessment should be conducted to confirm that wastewater is contained within the system (that is, the system does not leak) before its arrival at a functioning treatment or disposal site, or both. Risks pertaining to the adequacy of the collection system or to treatment and disposal methods should be assessed following a safety planning approach, with critical control points prioritized for mitigation ^{xix}

Toilets and the handling of faeces

It is critical to conduct hand hygiene when there is suspected or direct contact with faeces (if hands are dirty, then soap and water are preferred to the use of an alcohol-based hand rub). If the patient is unable to use a latrine, excreta should be collected in either a diaper/continence pad or a clean bedpan and immediately and carefully disposed of into a separate toilet or latrine used only by suspected or confirmed cases of COVID-19. In all health care settings, including those with suspected or confirmed COVID-19 cases, faeces must be treated as a biohazard and handled as little as possible.

After disposing of excreta, bedpans should be cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, and then rinsed with clean water. The rinse water should be disposed of in a drain, toilet or latrine. Other effective disinfectants include commercially available quaternary ammonium compounds, such as cetylpyridinium chloride, used according to manufacturer's instructions, and peracetic or peroxyacetic acid at concentrations of 500–2000 mg/L.

Anyone handling faeces should follow WHO contact and droplet precautions ^{xx} and use PPE to prevent exposure, including long-sleeved gowns, gloves, boots, masks, and goggles or a face shield. If diapers/incontinence pads are used, they should be disposed of as infectious waste as they would be in all situations. Workers should be trained in how to put on, use, and remove PPE so that these protective barriers are not breached. If PPE is not available or the supply is limited, hand hygiene should be regularly practiced, and workers should keep at least 1 m distance from any suspected or confirmed cases. ^{xxi}

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

There is no reason to empty latrines and holding tanks of excreta from suspected or confirmed COVID-19 cases unless they are at capacity. In general, the best practices for safely managing excreta should be followed. Latrines or holding tanks should be designed to meet patient demand, considering potential sudden increases in cases, and there should be a regular schedule for emptying them based on the wastewater volumes generated. PPE (long-sleeved gown, gloves, boots, masks,

and goggles or a face shield) should be worn at all times when handling or transporting excreta off site, and great care should be taken to avoid splashing. For crews, this includes pumping out tanks or unloading pumper trucks. After handling the waste and once there is no risk of further exposure, individuals should safely remove their PPE and perform hand hygiene before entering the transport vehicle. Soiled PPE should be put in a sealed bag for later safe laundering.

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

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

Environmental cleaning, laundry and disinfection procedures

Recommended cleaning and disinfection procedures for health care facilities should be followed consistently and correctly. Cleaning environmental surfaces with water and detergent and applying commonly used hospital disinfectants (such as sodium hypochlorite) is effective and sufficient. Also manage laundry, food service utensils and medical waste in accordance with safe routine procedures.

Laundry should be done and surfaces in all environments in which COVID-19 patients receive care (treatment units, community care centres) should be cleaned at least once a day and when a patient is discharged.^{xxii}

Many disinfectants are active against enveloped viruses, such as the COVID-19 virus, including commonly used hospital disinfectants. Currently, WHO recommends using:

- 70% ethyl alcohol to disinfect small areas between uses, such as reusable dedicated equipment (for example, thermometers);
- sodium hypochlorite at 0.1% (1000 ppm) for disinfecting surfaces and 0.5% (5000 ppm) for disinfection of blood or bodily fluids spills in health-care facilities.

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

For detailed information regarding cleaning methods, disinfectants and cleaning monitoring and evaluation tools please see CDC and ICAN. Best Practices for Environmental Cleaning in Healthcare

Facilities in Resource-Limited Settings. Atlanta, GA: US Department of Health and Human Services, CDC; Cape Town, South Africa: Infection Control Africa Network; 2019.^{xxiv} Available at: <https://www.cdc.gov/hai/pdfs/resourcelimited/environmental-cleaning-508.pdf>
<http://www.icanetwork.co.za/icanguideline2019/>

Cleaning and disinfection of biomedical devices

Sterilization or decontamination of items, equipment and medical devices is a complex and highly specialized subject. All patient care surfaces, medical devices and equipment used in health care have the potential to become contaminated with microorganisms. Once contaminated, these items can pose a risk to patients, staff and visitors. As an essential component of IPC strategies, all health-care facilities should implement a standardized operating procedure for the safe and effective decontamination of high-touch patient care areas and all reusable items and equipment to prevent cross-infection. It is essential that facilities have a dedicated area for the decontamination of reusable items and equipment.

The WHO manual 'Decontamination and Reprocessing of Medical Devices for Health-care Facilities' outlines the decontamination lifecycle, including specific cleaning, disinfection and sterilization methods applied to medical devices. Always follow the device manufacturer's instructions for decontamination so as to not cause any damage and ensure proper decontamination.^{xxv}

2.4 Isolation Rooms

2.4.1 Isolation Room Requirements

Isolation rooms should be designed as follows:

- be single rooms with attached bathrooms (or with a dedicated commode);
- ideally be under negative pressure (neutral pressure may be used, but positive pressure rooms should be avoided)
- be sited away from busy areas or close to vulnerable or high-risk patients, to minimize chances of infection spread;
- have dedicated equipment (for example blood pressure machine, peak flow meter and stethoscope)
- have signs on doors to control entry to the room, with the door kept closed; and
- have an ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment.

2.4.2 Preparation of isolation Room / unit

The isolation room should be prepared as follows:

- Isolate infectious patient in a single room
- If there is no single room, isolate in the cohort room. In cohort room, always keep suspected cases separate from confirmed cases
- If single and cohort room, keep the single room for suspected cases and the cohort room for confirmed cases
- Avoid movement of infectious suspected and confirmed patients (only if crucial)
- Limit number of visitor (ideally only one)
- Staff help the visitor select PPE base on route of transmission, visitor must be trained for wearing PPE
- Put a clear sign of restrictive area and fence around isolation room/unit

- Set up isolation room/ unit as per standard
- Prepare the isolation room and ensure refurbishment of PPE/ material.

PPE should be kept on the trolley at all times so that it is always available for healthcare workers.

The PPE to wear will depend on the type of isolation precautions; therefore several PPE procedures are possible. Keep in mind the steps of removing the PPE (from more contaminated to less), this will guide the step of putting on the PPE.

2.4.3 HCWs/staff in the isolation room /unit

Apply IPC standard and adequate additional precaution(s) based on route of transmission.

Exclusively assigned trained staff (medical and non-medical)

- If HCW is not trained, he/she must not wear PPE and enter in the isolation room

Prior entering to the room:

- HCW must record their name and contact details
- Perform hand hygiene and wear PPE for identify route of transmission (following PPE procedure)

After contact with isolated patient:

- HCW must safely take off PPE, and thoroughly wash hands precautions (following PPE procedure)

2.5 Collecting and handling laboratory specimens from patients with suspected COVID-19.

All specimens collected for laboratory investigations should be regarded as potentially infectious. HCWs who collect, handle, or transport clinical specimens should adhere rigorously to the following standard precaution measures and biosafety practices to minimize the possibility of exposure to pathogens:

- Ensure that HCWs who collect specimens use appropriate PPE (i.e. eye protection, a medical mask, a long-sleeved gown, and gloves). If the specimen is collected during an aerosol-generating procedure, personnel should wear a particulate respirator at least as protective as a US NIOSH-certified N95, an EU standard FFP2, or the equivalent;
- Ensure that all personnel who transport specimens are trained in safe handling practices and spill decontamination procedures;
- Place specimens for transport in leak-proof specimen bags (secondary containers) that have a separate sealable pocket for the specimen (a plastic biohazard specimen bag), with the patient's label on the specimen container (the primary container), and a clearly written laboratory request form;
- Ensure that laboratories in health care facilities adhere to appropriate biosafety practices and transport requirements, according to the type of organism being handled;
- Deliver all specimens by hand whenever possible. DO NOT use pneumatic-tube systems to transport specimens;
- Document clearly each patient's full name, date of birth and "suspected COVID-19" on the laboratory request form. Notify the laboratory as soon as possible that the specimen is being transported. ^{xxvi}

2.6 Management of Dead Bodies

While the risk of transmission of COVID-19 from handling the body of a deceased person is low, health care workers and others handling dead bodies should apply standard precautions at all times. Health care workers or mortuary staff preparing the body should wear: scrub suit, impermeable disposable gown (or disposable gown with impermeable apron), gloves, mask, face shield (preferably) or goggles, and boots. After use, PPE should be carefully removed and decontaminated or disposed as infectious waste as soon as practicable and hand hygiene should be performed. The body of a deceased person confirmed or suspected to have COVID-19 should be wrapped in cloth or fabric and transferred as soon as possible to the mortuary area. Body bags are not necessary for COVID-19 virus although they may be used for other reasons (e.g. excessive body fluid leakage).

The responsible authority within the health-care facility should organize and prepare a team for dead body management. This team should have received appropriate training. They should have the necessary materials and PPE to prepare the body for burial.^{xxvii}

3. Health-Care Waste Management

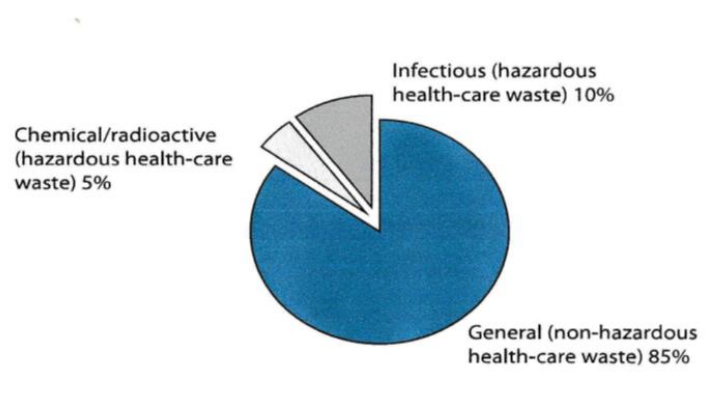
3.1 Introduction

The term health-care waste includes all the waste generated within health-care facilities, research centres and laboratories related to medical procedures. The guiding principle for health-care waste is to apply cradle-to-grave management to avoid/minimize cross-infection in health-care facilities, such as laboratories and isolation units, and community exposure. This section describes the waste management strategies that should be implemented and followed in the context of the Project.

3.2 Types of Health-Care Waste and Relative Amounts

In general, between 75% and 90% of the waste produced in a HCF is comparable to domestic waste and usually called “non-hazardous” or “general health-care waste”. It comes mostly from the administrative, kitchen and housekeeping functions at health-care facilities and may also include packaging waste and waste generated during maintenance of health-care buildings. The remaining 10–25% of health-care waste is regarded as “hazardous” and may pose a variety of environmental and health risks (Figure 5)^{xxviii}

Figure 7 - Typical waste compositions in health-care facilities⁵



These numbers suggest that overall, the volume of material classified as hazardous is relatively small. However, should innocuous waste come into contact with hazardous waste, the entire volume

⁵ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. P3

becomes hazardous and must be treated as such. Failing to separate such wastes, increases the total volume and complexity of waste to be disposed of, putting stress and cost on infrastructure and systems. Separation of waste is therefore a key component of effective waste management. Also, given the infectious nature of the novel coronavirus, some wastes that are traditionally classified as non-hazardous may be considered hazardous and requires special handling and awareness, as they may pose an infectious risk to healthcare workers in contact with the waste.

Wastes from health facilities typically fall into the following categories^{xxix}:

Table 3 – Categories of Healthcare Wastes⁶

Waste categories	Descriptions and examples
Hazardous health-care waste	
Infectious waste	Waste known or suspected to contain pathogens and pose a risk of disease transmission, e.g. waste and waste water contaminated with blood and other body fluids, including highly infectious waste such as laboratory cultures and microbiological stocks; and waste including excreta and other materials that have been in contact with patients infected with highly infectious diseases in isolation wards.
Sharps waste	Used or unused sharps, e.g. hypodermic, intravenous or other needles; auto-disable syringes; syringes with attached needles; infusion sets; scalpels; pipettes; knives; blades; broken glass.
Pathological waste	Human tissues, organs or fluids; body parts; fetuses; unused blood products.
Pharmaceutical waste, cytotoxic waste	Pharmaceuticals that are expired or no longer needed; items contaminated by, or containing, pharmaceuticals. Cytotoxic waste containing substances with genotoxic properties, e.g. waste containing cytostatic drugs (often used in cancer therapy); genotoxic chemicals.
Chemical waste	Waste containing chemical substances, e.g. laboratory reagents; film developer; disinfectants that are expired or no longer needed; solvents; waste with high content of heavy metals, e.g. batteries, broken thermometers and blood pressure gauges.
Radioactive waste	Waste containing radioactive substances, e.g. unused liquids from radiotherapy or laboratory research; contaminated glassware, packages or absorbent paper; urine and excreta from patients treated or tested with unsealed radionuclides; sealed sources.
Non-hazardous or general health-care waste	
	Waste that does not pose any specific biological, chemical, radioactive or physical hazard.

Wastes that may be generated from laboratories and isolation facilities to be supported by the Project could include non-infected solid waste (e.g. packaging waste), infected solid waste (e.g. syringes), liquid waste (e.g. blood and other body fluids), and air emissions (e.g. from incinerators). The exact types and quantities (weight and volume) of waste generated will be identified during

⁶ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014

project implementation. To understand where and how much waste is generated, the health-care facilities should use a simple table as a starting point (Figure 6)^{xxx}.

Figure 8 - *Sample sheet for assessing waste generation*⁷

Name of the health-care facility: Week:															
Waste-collection point: department/ location	Waste category ^a (specify)	Quantity of waste generated per day (weight and volume)													
		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
		kg	litre	kg	litre	kg	litre	kg	litre	kg	litre	kg	litre	kg	litre

^a Infectious waste, pathological waste, sharps, pharmaceutical waste, cytotoxic waste, waste with high heavy metal content, radioactive waste
Source: adapted from Christen (1996)

3.3 Waste Management Measures

3.3.1 Waste Minimization

The health-care facilities should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety considerations.

3.3.2 Waste Separation

All HCFs supported by the Project shall organize waste segregation at sources. The various waste streams should be segregated and handled in accordance with the following WHO guidelines as close as practicable and safely to the point of generation^{xxxi}.

The simplest and safest waste segregation system is to separate all hazardous waste from non-hazardous general waste at the point of generation. Infectious waste bins⁸ should be located as close as possible to where waste is generated (e.g. nursing stations, procedure rooms or points of care). Placing sharps containers and segregation bins on treatment trolleys enables medical staff to segregate waste at the bedside or other treatment site. Placing the general waste container close to the sink or under a towel dispenser will encourage staff to place towels into the non-infectious receptacle.

⁷ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014, P62

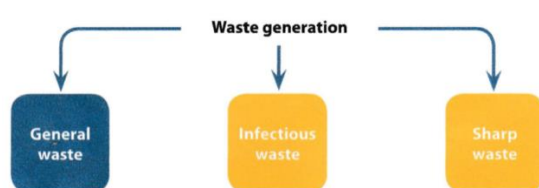
⁸ All bins MUST use appropriate bin liners for safe handling.

Table 4 – Handling of wastes at point of generation⁹

Waste categories	Colour of container and markings	Type of container	Collection frequency
Infectious waste	Yellow with biohazard symbol (highly infectious waste should be additionally marked HIGHLY INFECTIOUS).	Leak-proof strong plastic bag placed in a container (bags for highly infectious waste should be capable of being autoclaved).	When three-quarters filled or at least once a day.
Sharp waste	Yellow, marked SHARPS with biohazard symbol.	Puncture-proof container.	When filled to the line or three-quarters filled.
Pathological waste	Yellow with biohazard symbol.	Leak-proof strong plastic bag placed in a container.	When three-quarters filled or at least once a day.
Chemical and pharmaceutical waste	Brown, labelled with appropriate hazard symbol.	Plastic bag or rigid container.	On demand.
Radioactive waste	Labelled with radiation symbol.	Lead box.	On demand.
General health-care waste	Black.	Plastic bag inside a container or container which is disinfected after use.	When three-quarters filled or at least once a day.

However, to ensure staff and patients are protected, the hazardous waste portion is very commonly separated into two parts: used sharps and potentially infectious items. Consequently, the segregation into separate containers of general non-hazardous waste, potentially infectious waste and used sharps is often referred to as the “three-bin system”^{xxxii}.

Figure 9 - Three-Bin System¹⁰



This makes it easier to put waste items into the correct container and maintains the necessary segregation during transport, storage, treatment and disposal. Additional labelling of waste containers is used to identify the source, record the type and quantities of waste produced in each area. A simple approach is to attach a label to each filled bag with the details of the medical area, date and time of closure of the bag and the name of the person filling out the label. This allows any problems with waste segregation to be traced back to the point of generation.

⁹ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014

¹⁰ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014

An international hazard symbol on each waste bag - such as the biohazard symbol below - should also be used.

Figure 10 - Biohazard Symbol¹¹



There are 19 public hospitals in Samoa that operate a color-coded bag system for the collection, storage, and transfer of medical wastes: green (general waste), pink (radioactive waste), and red (hazardous chemical waste). Containers are also provided for the safe disposal of sharps. The facilities installed as part of the Project should adopt this system to avoid confusion and ensure consistency with existing waste collection systems.

3.3.3 Waste Handling and Collection

At all times the waste must be handled safely. Waste bags/bins and sharp containers should be filled to no more than three-quarters full (or to the fill line on sharps bins when marked). Once this level is reached, they should be sealed and double bagged (if possible), ready for collection. Plastic bags should never be stapled but may be tied in a knot or sealed with a plastic tag or tie. Replacement bags or containers should be available at each waste generation area.

Collection times should be fixed and appropriate to the quantity of waste produced in each area of the health-care facility. Generally, pathological and infectious waste should be collected at least once per day. General waste should not be collected at the same time, or in the same trolley, as infectious or other hazardous wastes. The frequency of collection should be refined through experience to ensure that there are no overflowing waste containers at any time.

On-site transportation should take place whenever possible during less busy times (i.e. in the evenings or very early morning). Separate routes for transporting hazardous and non-hazardous waste should be planned and used. In general, a waste route should follow the principle from “clean to dirty”. Collection should start from the most hygienically sensitive medical areas (e.g. intensive care, dialysis, operating theatres) and follow a fixed route around other medical areas and interim storage locations.^{xxxiii} Transport staff should wear adequate PPE including gloves, closed shoes, overalls and masks. Education and training must be provided to all waste transport workers and include how to safely handle waste containers that leak or are broken.

Health-care waste can be bulky and heavy and should be transported by using wheeled trolleys or carts that are not used for any other purpose. Waste, especially hazardous waste, should never be transported by hand due to the risk of accident or injury from infectious material or incorrectly disposed sharps that may protrude from a container. It is recommended that spare trolleys are available in the case of breakdowns and maintenance.

Waste workers are one of the most important sanitary barriers to keep communities safe. Current scientific research has not provided evidence that waste management is a vector for the

¹¹ Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014

transmission of COVID-19, but considering waste workers are essential workers, additional measures should be considered such as:^{xxxiv}:

- Strict adherence to enhanced hygiene norms, including frequent change and cleaning of PPE and professional clothing; replacing professional gloves in the event of breakage or any incident of potential contamination; sanitizing regularly facilities, vehicle cabins and other equipment. An important measure here is to make sure that where masks are usually worn, the workers are removing masks and gloves without getting in contact with them. This means using correct techniques for putting the mask on and taking it off (see Annex 2).
- Adaptation (as much as possible and considering the particularities of the waste collection systems) of the behaviour in order to avoid contamination between workers in teams like strict respect of the distance between people (>1m), limiting as few as possible workers in the same area (control room, canteens, changing rooms) and all precautionary measures helping at preserving health of workers in safe occupational conditions.
- Direct contact (without gloves) with bins or bags should be avoided.
- Uniforms should be changed daily or cleaned - cleaning of work clothes and shoes minimises the possibility of dispersing the virus and limiting its transmission.
- If possible, put a disposable set of gloves, on a daily basis, in direct contact with workers' skin, before wearing usual work gloves.
- Make sure that there are disinfectants and alcohol hand rub hand available to waste collectors and workers.
- Ensure frequent hand-washing and increased cleaning in workers' facilities.
- Drivers and collectors should avoid contact with residents and employees from serviced business.

3.3.4 Aggregation and Temporary Storage

A storage location for health-care waste should be designated inside the health-care facility. These storage areas should be sized according to the quantities of waste generated and the frequency of collection. These areas must be totally enclosed and separate from supply rooms or food preparation areas. Only authorized staff should have access to the waste storage areas. Equipment for accidental spill/leakage should be available. Proper maintenance and disinfection of the storage areas should be carried out.

- **General non-hazardous waste storage:** General non-hazardous waste should be stored and kept for collection to the communal landfill/dumpsite or communal waste incinerator. It should be collected at least every week. The storage area should be enclosed, paved and connected to a public road. The gate should be big enough that the collection vehicles can enter.
- **Infectious and sharp waste storage:** The storage place must be identifiable as an infectious waste area by using the biohazard symbol. Floors and walls should be sealed or tiled to allow easy cleaning and disinfection. Storage times for infectious waste (e.g. the time gap between generation and treatment) should not exceed 24 hours.
- **Pathological waste storage:** Pathological waste is considered biologically active and gas formation during the storage should be expected. To minimize the possibility of this happening, storage places should have the same conditions as for infectious and sharps wastes. Where possible, waste should be stored under refrigerated conditions. The body of a deceased person confirmed or suspected to have COVID-19 should be wrapped in cloth or fabric and transferred as soon as possible to the mortuary area.

3.4 Waste Disposal

3.4.1 Solid Waste Disposal

Informal disposal may lead to contamination of soil and groundwater, but more importantly, to further spreading of the virus to nearby communities. Therefore, final disposal of healthcare wastes from facilities financed by the Project must be either off-site to an approved facility or to a permitted on-site incinerator:

- For non-infectious solid waste, disposal at an approved/licensed landfill maybe the most practical waste disposal option.
- For non-infectious hazardous waste (e.g. fly/bottom ash), disposal at a facility licensed to take hazardous wastes.
- For infectious waste, high temperature incineration or autoclaving solutions are preferable if available. High combustion incinerators maybe funded by the project and should be permitted and equipped with air emission control systems, such as scrubbers. The following waste categories should not be incinerated:
 - mercury thermometers (preferably collect for mercury recovery);
 - pressurized containers (disposal in approved facility);
 - polyvinyl chloride (PVC) plastics such as intravenous sets, catheters and PVC containers for sharps (disposal in approved facility);
 - vials of vaccines (disposal in approved facility);
 - anatomical wastes or body parts (disposal in approved facility)
 - radioactive/radiographic wastes (disposal in approved facility).

3.4.2 Transitional Arrangements for Infectious Waste (if required)

Some low-resource areas may lack the regional infrastructure to treat health-care and other infectious and hazardous waste. Even if the right treatment for infectious waste is available, in pandemics the amount of health-care waste generated is usually much more than usual, so sanitary landfills can provide an acceptable alternative route for safe disposal. Furthermore, fuel supply for the incinerators may be an issue. In those cases, and as an exceptional measure, the waste produced in health-care facilities during the COVID-19 Pandemics may have to be stored in sanitary or engineered landfills in a secured and separated area, isolated from the regular waste, and with immediate daily cover. The main purpose of such measures is to ensure that health-care waste won't be exposed nor mixed to non-infectious waste; waste workers will not be at risk during disposal activities and once healthcare waste is dumped, no human or animal will be able to be in contact with it^{xxxv}.

As a general rule, the following options may be implemented during implementation of the Project, but should be considered transitional, interim solutions:

Pathological waste disposal: Placenta pits can be effective in low-resource settings. They need to be located at specific sites to avoid contamination of groundwater, locked and fenced for security. Natural degradation and draining of liquid into the subsoil greatly reduces the volume of waste in the pit and facilitates the inactivation of pathogens. Pathological waste may be disposed of at a landfill when no other treatment options are available. However, disposal should be in a pre-specified area to prevent recyclers or scavengers coming into contact with the waste. Waste should also be covered as quickly as possible.

Disposal of hazardous ash: Fly ash and bottom ash from incineration is generally considered to be hazardous, because of the possibility of heavy metal content and dioxins and furans. It should

preferably be disposed in sites designed for hazardous wastes, e.g. designated cells at engineered landfills, encapsulated and placed in specialized mono fill sites, or disposed in the ground in an ash pit.

Sharp waste disposal: Even after decontamination, sharp waste may still pose physical risks. There may also be risk of reuse. Decontaminated sharp waste can be disposed of in safe sharp pits on the health-care facility premises or encapsulated by mixing waste with immobilizing material like cement before disposal. These procedures are only recommended in cases where the waste is handled manually and the landfill for general waste is not secured.

Infectious and hazardous waste: Disposing of infectious/hazardous wastes without prior treatment into a general non-hazardous landfill greatly increases the risks to human health and the environment. If the waste is not properly covered, or disturbed by any means, further risks will arise. It is therefore poor practice to dispose of hazardous waste directly into a non-engineered landfill and should only be considered as a last resort when no other options are available.

3.4.3 Wastewater and Faecal Waste Disposal

There is no evidence to date that the COVID-19 virus has been transmitted via sewerage systems with or without wastewater treatment. However, as viral fragments have been found in excreta and because of other potential infectious disease risks from excreta, wastewater should be treated in well-designed and well-managed centralized wastewater treatment works. The health-care facilities should ensure that wastewater effluent complies with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) is capable of handling the type of effluent discharged.

3.5 Relevant International Disposal Issues

The Basel Convention for trans-boundary movement and disposal of hazardous substances and waste is primarily designed to avoid the dumping of hazardous materials on countries without adequate hazardous waste infrastructure. Therefore, the provisions of this instrument do not apply if the transport and disposal of hazardous waste remains within Samoa.

4. Implementation Arrangements and Capacity Building

4.1 Implementation Arrangements

Ministry of Health

The MOH will be responsible for implementation of the project, including overall coordination, results monitoring and communicating with the World Bank on project progress. The MOH will have the overall responsibility for ensuring that environmental and social issues are adequately addressed.

The project will rely on the MOH's existing organizational structure, including the involvement of the National Emergency Operations Centre (NEOC) that has been established to manage the COVID-19 emergency response plan. MOH technical departments and division – Public Health Services, Hospital and Clinical Services, National Health Surveillance and International Health Regulations Division will be involved in project implementation based on their functional capacities and institutional mandates. The Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division is responsible for coordinating and managing development assistance that are channeled through the MOH for health sector development.

Health Sector Coordination, Resourcing and Monitoring Division

The Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division will perform the day-to-day project management by providing support to the relevant MOH divisions in implementing project activities in line with the ESMF and associated instruments. This includes procurement of medical supplies, commodities and equipment, and civil works contracts for the waste management facility and laboratory. The unit will be supported by external safeguards consultant.

Healthcare Protection and Enforcement Division

The Healthcare Waste Principal Officer is currently responsible for overseeing the management of collection, transport, treatment and disposal of medical waste in Samoa. The Principal Officer will work on design, procurement, and installation of the healthcare waste incinerator. He will also make work on the Occupational Health and Safety requirements, Community Engagement and preparing any safeguards instruments such as ESIA, ESMP and WMP with O&M instructions.

Health Surveillance Division

The Principal Laboratory Officer is responsible for the management of day-to-day operations of Public Health laboratory activities. The Officer will also work on design, construction and operation of the new Public health Laboratory and healthcare waste incinerator. This includes the Occupational Health and Safety requirements, Community Engagement and preparing any safeguards instruments such as ESIA and ESMP.

Both Healthcare Waste Principal Officer and Principal Laboratory Officer will be supported by the outsourced safeguards consultant and the Ministry of Finance CTSSU Safeguards Specialist.

Public Health Laboratory

At the Public Health Laboratory, the Deputy Director General of Public Health should formally appoint the Principal Laboratory Officer as 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 control and waste management and would ensure that health care waste management activities are being carried out in accordance with the IPC&WMP. This person/team would also manage, coordinate and regularly review the performance of the facility in terms of how the waste streams in the Public Health Laboratory are separated, tracked and recorded, and oversee the procedures for the safe transportation of potentially infectious material.

4.2 Capacity Building

The Samoan health sector has experience in infection prevention and control, health-care waste management, and communication and public awareness for emergency situations through other national and partner funded health projects. However, effective implementation of the environmental and safeguards management will require capacity development for those responsible for implementing sub-projects. Training and capacity support of laboratory and waste management personnel during project implementation will be further identified during implementation.

In particular, capacity building and training will be provided to the Ministry of Health staff responsible for operation of the Healthcare Waste Management Facility. This includes training in the collection and handling of waste and operation and maintenance of the incinerator.

Human resource development including training and capacity building for laboratory staff will also be undertaken.

5. Monitoring and Reporting

Healthcare Protection and Enforcement Division should establish an information management system to track and record the waste streams from the point of generation, segregation, packaging, temporary storage, transport carts/vehicles, to treatment facilities. The Division is encouraged to develop an IT based information management system should their technical and financial capacity allow.

Health Surveillance Division should take overall responsibility, lead an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices in the laboratories and medical facilities. Internal reporting and filing systems should be in place and submitted to the Health Sector Coordination, Resourcing and Monitoring Division for review on request.

The Safeguards Specialist/s will prepare six-monthly monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project to submit to the World Bank per government and World Bank requirements.

Attachment 1 - WHO hand cleaning and hand rub posters

1a – Hand Washing with Soap and Water



1b - Hand Hygiene with Alcohol-based Hand Rub (AHR)

Hand washing with Alcohol-based Hand Rub

 **Duration:**
20-30 seconds

-  **1** Apply AHR on palms
-  **2** Rub palms to palms
-  **3** Rub the back of both hands interlacing the fingers
-  **4** Rub palm to palm interlacing the fingers
-  **5** Rub the backs of fingers by interlocking the hands
-  **6** Rub the thumbs
-  **7** Rub palms with fingertips
-  **8** Once dried, your hands are safe

Annex 2 - Correct steps for donning (putting on) and doffing (safe removal) of PPE for health care settings.

HCWs must select the appropriate PPE after having assessed the risk of contact with body fluid.

The following is not a sequence of PPE. It is procedure for each PPE item.

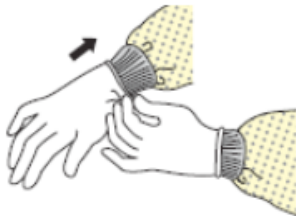
It is when the HCW remove the PPE that he/she may contaminate himself/ herself. Therefore wear PPE in a logical order, to be able to take off from the most contaminated item (higher risk) to the less contaminated item (lower risk).

Any PPE procedure must start by performing hand hygiene first.

When removing PPE, the last step is to thoroughly perform hand hygiene.

1. Gloves

Put On



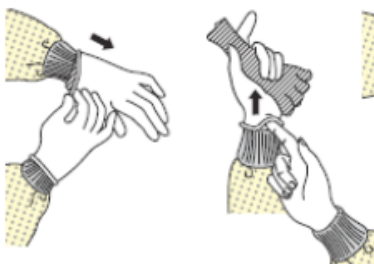
Putting on gloves

Put On

1. Carefully put on disposable gloves (to avoid breaking the gloves)

When wearing long sleeves gown, gloves cover the wrist of the gown

Take Off



Removing gloves

Take Off

! Outside part of gloves is con-taminated!

1. Grasp outside of glove with opposite gloved hand; peel off

2. Hold removed glove in gloved hand or discharge in waste container

3. Slide fingers of un-gloved hand under remaining glove at wrist

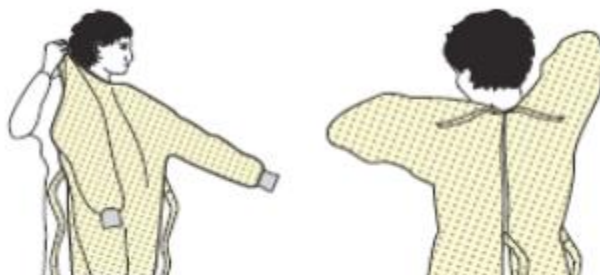
4. Peel glove off

5. Discard gloves in waste container

2. Gown

Put On

1. Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
2. Fasten in back of neck and waist



Take Off

1. Unfasten ties
2. Gown front and sleeves are contaminated!
3. Pull away from neck and shoulders, touching inside of gown (only if not wearing gloves)
4. Turn gown inside out
5. Fold or roll into a bundle and discard



Note: Reusable gown should be clean/ disinfected before being reuse

3. Surgical Mask

Put On

1. Secure ties or elastic bands at middle of head and neck
2. Fit flexible band to nose bridge
3. Fit snug to face and below chin



Put On



Take Off









Take Off

! DO NOT TOUCH with hands the front of mask, it is contaminated!



1. Grasp ties or elastics and take off
2. Discard in waste container

4. Eyes protection (safety glasses, goggles or face shield)

4.1 Procedure for goggle or face shield

Put On		Put On
		
Goggle	face shield	
Place goggle or face-shield over eyes and face, and adjust to fit		
Take Off		Take Off
		
		<p>! DO NOT TOUCH, with hands front of the eyes protection, it is contaminated!</p> <p>1. Take off, by handling the head band, elastics</p> <p>2. Place in designated receptacle for reprocessing or in waste container for single use (e.g. face shield).</p>

4.2 Procedure for safety glasses

Put On	Put On
	
	Place item over face and eyes and adjust to fit
Take Off	Take Off
<p>! DO NOT TOUCH with hands front of the eyes protection, it is contaminated!</p> <p>To take off, handle by ear pieces</p> <p>Place in designated receptacle for reprocessing or in waste container for single use (e.g. face shield).</p>	

Annex 3 – The 5 moments for hand hygiene



Recommendation

Routine Hand Hygiene

Hand hygiene must be performed before and after every episode of patient contact.

- Before touching a patient
- Before a procedure
- After a procedure or body substance exposure risk
- After touching a patient
- After touching patient's surroundings

Note: Hand hygiene **MUST** also be performed after taking off PPE.

References

Abbreviations and Acronyms

CERC	Contingent Emergency Response Component
ESCP	Environmental and Social Commitment Plan
ESHS	Environmental, Social, Health and Safety
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standards
GoS	Government of Samoa
HSCRM	Health Sector Coordination, Resourcing and Monitoring Division
ILO	International Labour Organization
LMP	Labour Management Procedure
MOH	Ministry of Health
NOEC	National Emergency Operations Committee
OHS	Occupational Health and Safety
MOH/HSCRM Division	Project Coordination Unit
PPE	Personal protective equipment
UNICEF	United Nations Children's Fund
UNOPS	United Nations Operation for Project Services
WB	World Bank
WHO	World Health Organisation

1. Introduction

The Samoa Covid-19 Emergency Response Project will assist the Government of Samoa (GoS) in its efforts to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. The Project will finance critical activities outlined in the Samoan National Emergency Response Plan.

These Labour Management Procedures (LMP) for MOH/HSCRM Division and contracted workers are to ensure proper working conditions and management of worker relationships, occupational health and safety, and to prevent sexual exploitation and abuse and sexual harassment.

1.1 Project Management Overview

The MOH will be responsible for implementation of the project, including overall coordination, results monitoring and communicating with the World Bank on project progress. The MOH will have the overall responsibility for ensuring that environmental and social issues are adequately addressed in accordance with this ESMF.

The project will rely on the MOH's existing organizational structure, including the involvement of the National Emergency Operations Centre (NEOC) that has been established to manage the COVID-19 emergency response plan. MOH technical departments and division – Public Health Services, Hospital and Clinical Services, National Health Surveillance and International Health Regulations Division will be involved in project implementation based on their functional capacities and institutional mandates.

The Health Sector Coordination, Resourcing and Monitoring (HSCRM) Division is responsible for coordinating and managing development assistance that are channeled through the MOH for health sector development, including the recently approved Samoa Health System Strengthening Program (P164382). This division works to pool the resources of the whole health sector, focusing on the coordination, distribution, and monitoring of resources and finances as well as the progress of the Health Sector Program.

The HSCRM Division will perform the day-to-day project management by providing support to the MOH divisions in implementing project activities in line with the national preparedness and response plan for COVID-19, including procurement of medical supplies, commodities and equipment, and other activities in the procurement plan. The HSCRM Division will work together with the Finance and Procurement (F&P) Division to manage and implement activities in the procurement plan.

The MOH will contract United Nations Operation for Project Services (UNOPS) to procure and provide medical equipment, consumables and other laboratory and medical supplies.

2. Labour Use on the Project

1.2 Categorization of the Workforce

ESS2 categorizes Project workers into four different categories:

1. Direct workers: People employed or engaged directly to work specifically in relation to the Project.

2. Contracted workers: People employed or engaged by third party contractors to perform work related to core function of the Project, regardless of location.
3. Primary supply workers: People employed or engaged by the primary suppliers. (This category of workers is not expected to be engaged on the Covid-19 Emergency Response Project and is not discussed in the LMP.)
4. Community workers: People employed or engaged in providing community labour. (This category of workers is not expected to be engaged on the Covid-19 Emergency Response Project and is not discussed in this LMP.)

Direct Workers

Two types of direct workers will be employed by the Project: **direct workers – Government** and **direct workers - other**.

Direct workers – Government are civil servants employed by the MOH who will be involved in project implementation. They will remain subject to the terms and conditions of their existing public sector employment agreement. The MOH and the Public Service Commission (PSC) collaboratively manage the public sector health workers. The PSC operates under the *Public Service Act 2004* and has primary responsibility for public sector management including human resources issues. Since its inception, the DPM has controlled most staff management practices in the health sector including recruitment and selection, discipline and performance management.

The number of government staff involved in Project implementation is not known yet. Direct workers – Government will be required to comply with the measures adopted by the project for addressing occupational health and safety issues (ESS2 paragraphs 24 to 30) including those specifically related to COVID-19, as well as measures to protect the workforce in terms of child labour and forced labour (ESS 2 paragraphs 17 to 20).

Direct workers - other are those employed as full and part-time consultants by the MOH/HSCRM Division under the Project.

The HSCRM Division currently consists of 7-8 personal. The Project will recruit additional staff and/or consultants to support the implementation activities and provide capacity building to personnel under the HSCRM and F&P Divisions. All MOH/HSCRM Division staff are based in Apia.

The total number of MOH/HSCRM Division employees, dedicated to this Project, is approximately 10 persons. Direct MOH/HSCRM Division staff will be required full time and around the year for the Project duration. Other experts/consultants will be hired on demand basis throughout the Project period.

Contracted workers

Contracted workers will be employed as required by UNOPS, works contractors, sub-contractors and any other intermediaries. These contractors are required to implement the LMP. It will be the contractors' responsibility to ensure that potential subcontractors adhere to the LMP.

Timing for involvement of contracted workers will be known at later stages. They will be engaged to support the implementation of various sub-components on specific time slots.

Migrant workers

Migrant workers expected to work on the Project include direct workers - international consultants. They will require a Foreign Employment Employee Permit issued by the Ministry of Commerce, Industry and Labour in accordance with the Labour and Employment Act 1990 and Foreign Employment Permit Policy 2017.

In the case of direct or contracted workers who are mobilised from abroad, workers will be required to self-isolate within Government managed facilities for 14 days and their temperature will be checked before being allowed to work.

1.3 Project Labour Requirements

Project labour requirements are shown in Table 1 below.

Table 1 Number, Characteristics and Timing of Workforce

Project Component	Estimated Number of Project Workers	Characteristics of Project Workers	Timing of Labour Requirements	Contracted Workers
Health system strengthening for case detection, management and treatment	Unknown at this stage	Contractors procuring goods and equipment; Contractors providing technical assistance/training	implementation	Contractor –UNOPS. Direct workers (other) – individual consultants
Infection prevention and control	Unknown at this stage	Contractors procuring incinerator and medical waste trucks Contractors preparing incinerator site Contractors providing technical assistance/training	implementation	Procurement Contractor –UNOPS. Company in charge of minor civil work for the establishing and upgrading of labs/centres. Direct workers (other) – individual consultants
Strengthening of the surveillance system and training of public health surveillance personnel for case detection, outbreak investigation, contact tracing and monitoring	Unknown at this stage	Contractors providing technical assistance/training for surveillance and health laboratory	implementation	Direct workers (other) – individual consultants
Establishment of public health laboratory for human and animal health	Unknown at this stage	Contractors for construction of laboratory Contractors procuring laboratory equipment	implementation	Company in charge of minor civil work for the establishing and upgrading of labs/centres. Procurement Contractor –UNOPS.

Project Component	Estimated Number of Project Workers	Characteristics of Project Workers	Timing of Labour Requirements	Contracted Workers
Conduct Joint External Evaluation (JEE) for International Health Regulations	Unknown at this stage	Contractors providing technical assistance for joint evaluation	implementation	Direct workers (other) – individual consultants
Implementation Management and Monitoring and Evaluation	Unknown at this stage	Consultants hired to support PM and environmental and social standards implementation, monitoring.	Implementation	Direct workers (other) – individual consultants

3. Potential Labour Risks

The MOH/HSCRM Division will demonstrate high standards of human resource management and adhere to Samoa's national labour and OSH legislation and international instruments including International Labour Office conventions ratified by Samoa.

On 1st May 2020, Samoa's State of Emergency Order was extended by four weeks. The possibility that the country's labour and OHS laws be amended to comply with the state of emergency has to be considered.

The most significant risks to worker health, safety and well-being are summarized in Table 2 below.

Table 2 Key Labour Risks

Project Activity	Key Labour Risks
General project administration and implementation (hiring of consultants, monitoring and reporting, financial management, audits, E&S management, project coordination, conducting behaviour and communication campaigns, conducting trainings, M&E)	<ul style="list-style-type: none"> • Risk of road accidents in travel to provinces (OHS) • Exposure to people who could have COVID-19 Project workers at risk of psychological distress, fatigue and stigma due to the nature of their work.
Minor civil works and/or construction works for the waste management facility on Savai'i and laboratory on Upolu.	<ul style="list-style-type: none"> • Terms of employment (employment period, remuneration, tax and insurance payments etc.) are not secured by contractual agreements. • Workers suffer discrimination and lack of equal opportunity in employment. • Use of child labour (under 18 years old) • Project workers at risk of psychological distress, fatigue and stigma due to the nature of their work. • Risks of workplace accidents, particularly when operating construction equipment, when working at height on

Project Activity	Key Labour Risks
	<p>building construction, and when handling heavy equipment and materials</p> <ul style="list-style-type: none"> • Risks from exposure to hazardous substances (dust, cement, chemicals used in construction etc.) • Accidents or emergencies (OHS) • Sexual Exploitation and Abuse (SEA), GBV and VAC to workers and community
Transportation of medical supplies, equipment	<ul style="list-style-type: none"> • Road traffic accidents expose workers and local communities to hazardous materials (OHS) • Risk of road accidents in travel to provinces (OHS) • Risks of accidents when handling heavy equipment • Infected transportation staff transmit COVID-19 to local populations
Transportation of medical waste	<ul style="list-style-type: none"> • Road traffic accidents expose workers and local communities to hazardous materials (OHS) • Risk of road accidents in travel to provinces (OHS) • Risks from exposure to hazardous substances (medical waste, contaminated waste) • Infected transportation staff transmit COVID-19 to local populations
Running laboratories and waste facilities etc. that deal directly with COVID-19 patients and/or their waste	<ul style="list-style-type: none"> • Terms of employment (employment period, remuneration, tax and insurance payments etc.) are not secured by contractual agreements. • Workers suffer discrimination and lack of equal opportunity in employment. • Use of child labour contravenes national legislation and international conventions ratified by Samoa • Project workers at risk of psychological distress, fatigue and stigma due to the nature of their work. • Risks from exposure to hazardous substances (medical waste, contaminated waste) • Risks from exposure with patients or their bodily fluids/waste, that have contracted COVID-19 • SEA, GBV and VAC to workers and community
Screening people entering the country	<ul style="list-style-type: none"> • Risks from exposure with people that may be positive for COVID-19

Project Activity	Key Labour Risks
	<ul style="list-style-type: none"> • People entering the country suffer abuse of power, discrimination, stigma during screening process
Conducting checks and screening on people in the community	<ul style="list-style-type: none"> • Risks from exposure with people that may be positive for COVID-19 • Community members suffer abuse of power, discrimination, stigma during screening process

4. Brief Overview of Labour Legislation: Terms and Conditions

3.1 Employment and Working Conditions Legislation

Samoa's main labour legislation is the Labour and Employment Relations Act 3013 (LERA). The Ministry of Commerce, Industry and Labour is responsible for its implementation.

The Employment Act is currently under review. The LERA aligns to the ILO conventions, particularly ILO's eight Fundamental Conventions and C144. The LERA applies to public bodies as well as private and non-government business entities. Labour and Employment Relations Regulations that operationalize the LERA were adopted in 2016.

Samoa also supports several international treaties with labour related provisions. Most importantly, as a member of the ILO, SAMOA has ratified several ILO Conventions including the eight Fundamental Conventions and 16 other Conventions.

Employment of non-citizens is regulated by the Labour and Employment Act 1990 and Foreign Employment Permit Policy 2017.

It is important to note that during emergencies such as the COVID-19 emergency, national laws, including labour laws, can be temporarily amended by Governments. The MOH/HSCRM Division and contractors are responsible for keeping up-to-date with the legislative situation and to adapt workplace practices accordingly.

Wages and deductions

The LERA (Art. 23) requires wages to be paid in accordance with the terms of the employee's contract of service. While the frequency at which wages shall be paid is not regulated, they must be paid before the expiration of the 7th day after the last day of the wage period (LERA, Art. 24). It is also permitted for employees to be employed under a piece work arrangement (LERA, Art. 50).

Wages are generally payable directly to the employee on a working day at his or her place of employment, but may be paid by money order, cheque, or by lodgement at a bank at the written request or consent of the employee.

The overall minimum wage in Samoa was raised by Cabinet from WST 2.30 to WST 3.00 (USD 1.11) with effect of 1 January 2020.

According to the LERA, men and women must be paid equal remuneration for work of equal value (Art. 20).

Employers may only deduct periods of absence that are not a leave entitlement, damage or loss of goods or money due to neglect, cost of meals, accommodation and amenities provided by the employer, recovery of advances, income tax, provident fund contributions and accident compensation, and some other lawful purposes (LERA Art. 27).

Total deductions, other than deductions for absence from duty, must not exceed 35% of wages.

Working hours and Rest Breaks

The LERA (Art. 47) sets the workweek at 40 hours and the workday at eight hours and forbids more than 4.25 hours of continuous work without a break of one hour. There are exceptions to these depending on the type of work. However, all employees must have at least 36 hours continuous rest within any seven-day-period, and must not work for more than 12 continuous hours. Employees must have at least 8 hours rest each day. Art. 49 regulates exceptions for shift work.

Overtime work

There is no prohibition on excessive or compulsory overtime. Employees must be paid at least one and a half time their ordinary rate of pay for overtime work and double their ordinary rate of pay for Sunday work (LERA, Art. 38 and 39).

Leave

The LERA (Art. 40) provides for a minimum of 10 days paid annual leave and up to 10 days paid sick leave per year.

Employees are also entitled to 6 weeks maternity leave, during which they receive two thirds of their normal salary. Upon return from maternity leave, they have to be appointed to the same or equivalent position that they held prior to taking maternity leave. Male employees are entitled to 5 days paid paternity leave.

All forms of paid leave are subject to the workers already working for an employer for a period of 12 consecutive months.

Termination

Termination procedures are stipulated in Part VIII of the LERA (Art. 52-57), including procedures regarding the notice of termination and termination payments. The notice period for terminations that both employers and employees have to adhere to is stipulated in Schedule 2 and depends on the duration of employment. Contracts for unspecified periods can be terminated without reason by giving notice in accordance with the Schedule.

The LERA does not stipulate of what constitutes unlawful reasons for termination, except for making it unlawful to terminate an employee during sick, maternity or paternity leave.

The LERA stipulates cases for which the notice period is not required, such as part-time and seasonal employees, and employees that are terminated due to misconduct.

Non-discrimination and equal opportunity

The LERA (Art. 19) prohibits sex discrimination in employment and stipulates that women employed in like work with men are entitled to the same remuneration.

Art. 20 prohibits discrimination against employees or applicants for employment in any employment policies, procedures or practices on arbitrary grounds including ethnicity, race, colour, sex, gender, religion, political opinion, national extraction, sexual orientation, social origin, marital status, pregnancy, family responsibilities, real or perceived HIV status and disability.

Disability is the only of these characteristics that is defined in the LERA.

While the LERA prohibits discrimination in employment against specific groups of workers (see above), migrant workers and children are not listed (see also child labour below).

The LERA does not explicitly refer to sexual harassment but it stipulates that an employee who is subjected to physical, mental or verbal abuse or harassment by the employer at any time or place may cease his or her service to an employer without notice (Art. 57).

Child Labour

The LERA prohibits the employment of children younger than 15 except in safe and light work (Art. 51). The minimum age for working in hazardous occupations at 18 years of age which is consistent with international standards. Hazardous occupations prohibited to children are identified in Article 51 of the Labour and Employment Relations Act, Article 21 of the Labour and Employment Relations Regulations, and the Government of Samoa Public Notice on Hazardous Work for Children.

The Labour and Employment Relations Regulations (Art. 22 and 23) permit children between ages 12 and 14 to engage in light work for a maximum of six hours per day between 8 am and 4 pm; however, it does not specify the conditions under which light work may be undertaken, nor does it define the activities that are permitted. The Regulations permit children between 15 and 17 years of age to work for a maximum of 12 hours per day between 6 am and 6 pm.

Forced Labour

Art. 8 of the Constitution and Art. 18 of the LERA prohibit the exaction, procurement and employment of forced labour.

Freedom of association and collective bargaining

The LERA protects the right of workers to form and join independent unions and bargain collectively, as well as the right of employers to establish and join organisations (Art. 21-22). The law prohibits antiunion discrimination, such as contract conditions that restrict free association. The law addresses a range of fundamental rights and includes the establishment of a national tripartite forum that serves as the governing body for labour and employment matters in the country.

The law protects the rights of workers to conduct legal strikes. There are certain restrictions on the right to strike for government workers, imposed principally for reasons of public safety (United States Department of State Bureau of Democracy, Human Rights and Labour. 2018).

Samoa ratified C098 - Right to Organise and Collective Bargaining Convention, 1949.

Mediation, Conciliation and Arbitration

Part X of the LERA establishes a framework for the conciliation of industrial disputes.

The statutory power of dispute resolution rests with the CEO who may conciliate in whatever manner he or she thinks fit when requested to do so by either party to an industrial dispute (Art. 63). Art 64 stipulates the process of referring a dispute to a conciliation committee as well as the composition of the committee.

If the conciliation process has been unsuccessful, the Minister responsible for labour and employment relations; may refer the industrial to a Judge of the Supreme Court (Art. 76).

Grievance mechanism

The LERA stipulates that it is the duty of the Ministry to investigate grievances or complaints and assist with conciliation efforts where there are disputes between employers and employees arising out of any term of the contract of service or the provisions of this Act (Art. 13 and 16). Part 9 of the Labour and Employment Relations Regulations provides details of the reporting and investigation of employees' grievances.

3.2 Occupational Health and Safety Legislation

Samoa's main OHS legislation are the [Occupational Safety and Health Act 2002](#) and *Occupational Safety and Health Regulations 2017*. The Ministry of Commerce, Industry and Labour is responsible for the implementation of these laws.

The main objective of the OSH Act is to enhance productivity, morale and welfare of people at work and of people affected by work activity. Other objectives are to secure the safety, health and welfare of employees; protect persons at or near place of work and protect the environment from risk to safety arising out of activities of employees at work; and foster a co-operative consultative relationship between government, employers and employees on health, safety and welfare of employees at work.

The most relevant parts of the Act are Sections 14 and 15, which says:

- An employer must take all reasonably practicable steps to protect the safety, health and welfare at work of employees and to provide and maintain a safe and healthy working environment including substances, systems of work and any building or public or private area in which work takes place.
- Requirements for safety are mainly the wearing of protecting clothing and equipment to avoid injury and damage to health.
- OSH requirements will be integrated into ESMPs and will be binding on construction contractors.

According to the Act, Public Service Commissioners and OSH inspectors may, enter any business day or night to undertake inspections. Employer are required to maintain accident registers and report serious incidents to the MCIL within 24 hours (refer [online form](#)). Employees can report matters to the Commissioner if they believe conditions are a serious danger to public health.

Penalties are prescribed in the OSH Act and Regulations and can range from 50 to 1000 penalty units depending on whether the violation is made by an individual or organisation, and the severity.

Samoa has not ratified the ILO Conventions dealing with occupational health and safety ([ILO Occupational Safety and Health Convention, 1981 \(No. 155\)](#) and the [ILO Safety and Health in Construction Convention, 1988 \(No.167\)](#)), nor [the ILO Occupational Health Services Convention \(No. 161\)](#). The OHS measures of the Project will include the requirements of the relevant sections of ESS2. Guidance will also be sought from the ILO Conventions, if applicable.

In addition to general OHS measures, COVID-19 related measures will be followed according to relevant WHO guidelines, important general WHO guidelines include the [WHO International Health Regulations](#) and the [WHO Emergency Response Framework](#). Project workplaces will be made ready for COVID-19 by following the [WHO guidance getting your workplace ready for COVID-19. Specific WHO guidelines addressing the situation in health care settings include WHO COVID-19 interim guidance regarding health workers' rights, roles and responsibilities](#), the [WHO IPC interim guidance for guidance on infection prevention and control \(IPC\) strategies for use when COVID-19 is suspected](#), the [WHO interim guidance on use of PPE for COVID-19 for rational use of PPE](#), and the [WHO interim guidance for guidance on water, sanitation and health care waste relevant to viruses](#).

Detailed measures will be introduced for all direct and contracted Project workers.

5. Roles and Responsibilities

4.1 National Department of Health

The MOH will have overall responsibility for the Project. The MOH/HSCRM Division will manage day-to-day implementation of the Project, under MOH supervision and reporting to responsible staff within MOH appointed by the minister. This will include engagement and management of direct workers in accordance with the LMP and monitoring contractors' compliance with the LMP.

The ACEO of the HSCRM Division, with the support of the CTSSU Safeguards Specialist, Healthcare Waste Principal Officer and Principal Laboratory Officer will be responsible for the following within their responsibility area:

- Implementing this LMP;
- Ensuring that contractors comply with this LMP;
- Monitoring to verify that contractors are meeting labour and OHS obligations toward contracted workers as required by Samoa's legislation and ESS2;
- Monitoring contractors implementation of this LMP;
- Monitoring compliance with occupational health and safety standards at all workplaces in line with the national occupational health and safety legislation;
- Monitoring compliance with COVID-19 related health and safety measures including making workplaces ready for COVID-19;

- Monitoring and implementing training on LMP,OHS and mitigating the spread of COVID-19 for Project workers as per the ESMF;
- Ensuring that all direct workers – other are provided with health insurance that covers treatment for COVID-19 infections:
- Ensuring that the grievance redress mechanism for Project workers is established and implemented and that workers are informed of its purpose and how to use it.
- Have a system for regular monitoring and reporting on labour and occupational safety and health performance; andData collection, monitoring, and analysis of the LMP as part of the Project's M&E activity.

Monitoring reports will be reviewed and submitted regularly to Manager of the MOH/HSCRM Division and NEOC, who will submit with other monitoring reports to the World Bank.

4.2 Contractors

The Contractor is responsible for management of their workers or subcontracted workers in accordance with this LMP, which will be supervised by MOH/HSCRM Division.

Contractors will be responsible for the following:

- To obey requirements of the national legislation (including emergency regulations) and this LMP;
- Maintain records of recruitment and employment process of contracted workers;
- Communicate clearly job description and employment conditions to contracted workers;
- Provide workers with evidence of all payments made, including benefits and any valid deductions;
- Providing all contracted workers with health insurance that covers treatment for COVID-19 infections;
- Maintain records regarding labour conditions and workers engaged under the Project, including contracts, registry of induction of workers including Code of Conduct, hours worked, remuneration and deductions (including overtime).
- Assigning a designated safety officer, conducting training on and implementing OHS measures and measures to mitigate the spread of COVID-19, recording safety incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, etc.) in accordance with the project's ESMF
- Ensure no child or forced labour is involved in the Project.
- Maintain records of training/induction dates, number of trainees, and topics.

- Implement the grievance redress mechanism for workers, maintaining records of any worker grievances including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up outstanding.
- Have a system for regular review and reporting on labour, and occupational safety and health performance.

This LMP can be updated to include additional details about the hired workforce of contractors, as necessary.

6. Project Labour Policies and Procedures

5.1 Terms and Conditions of Employment

Terms and conditions of direct workers are determined by their individual contracts. Permanent Project staff will have individual agreements (labour contract or service contract) with fixed monthly wage rates. All the recruiting procedures should be documented and filed in the folders in accordance to the requirements of Samoa's labour legislation and the ESS2.

Forty hour per week employment should be practiced. Requirements and conditions of overtime and leave entitlements are agreed as part of individual contracts.

The MOH/HSCRM Division will ensure that contractors are aware of, and comply, with the labour management and OSH policies and procedures outlined in this LMP. Each contractor will be required to submit an assessment of environmental and social risks (including labour risks) associated with their activities and risk mitigation measures in accordance with the Project's environmental and social requirements.

The Project's labour requirements are outlined in the sections below.

5.2 Age of Employment

The minimum age of employment for this Project shall be 18 years due to the hazardous working conditions. To ensure compliance, all employees will be required to produce a Tax Identification Number (TIN) as proof of their identity and age. Contractors and subcontractors will be required to receive approval for the specific procedures they will use to verify the ages of job applicants.

5.3 Occupational Health and Safety

The OHS measures of the Project are based on the requirements the OSH Act and Regulation, relevant sections of ESS2 and the WHO guidelines. These will particularly address the key risks identified in Chapter 2, which include infection of Project workers with Covid-19 and of psychological distress, fatigue and stigma due to the nature of their work.

The MOH/HSCRM Division's Environmental & Social Specialists will establish OSH guidelines for all Project workers monitor and implement training on OHS for Project workers and establish a system for regular monitoring and reporting on OSH performance including documentation and reporting of occupational accidents, diseases and incidents.

The MOH/HSCRM Division will ensure effective methods are put in place for responding to identified hazards and risks, establishing priorities for taking action and evaluating outcomes. WHO's [guidance for health workers](#) details both the rights of health workers and expectations of employers and managers in health facilities, as well as the responsibilities of health workers. These guidelines include preventive and protective measures (such as the use of PPE), emergency prevention and preparedness and response arrangements to emergencies, and remedies for adverse impacts as requires under the ESS2.

The guidelines will require compliance with the following provisions:

- Ensure workplace health and safety standards in full compliance with Samoa law, ESS2 and WHO Guidelines and include:
 - Basic safety awareness training to be provided to all persons as well as on COVID-19 prevention and related measures.
 - All Project vehicle drivers to have appropriate licenses.
 - Safe management of areas around operating equipment inside or outside hospitals/ laboratories/medical waste facilities.
 - All workers to be equipped with all necessary PPE (particularly facemask, gowns, gloves, handwashing soap, and sanitizer) to protect from COVID-19.
 - Secure scaffolding and fixed ladders to be provided for work above ground level.
 - First aid equipment and facilities to be provided in accordance with labour legislation.
 - At least one supervisory staff trained in safety procedures to be present at all times when construction work is in progress.
 - Adequate provision of hygiene facilities (toilets, hand-washing basins) and resting areas etc.
- Comply with Samoa legislation, WB's ESS2 requirements and other applicable requirements that relate to OHS hazards, including WHO specific COVID-19 guidelines.
- All workplace health and safety incidents to be properly recorded in a register detailing the type of incident, injury, people affected, time/place and actions taken.
- All workers (irrespective of contracts being full-time, part-time, temporary or casual) to be covered by insurance against occupational hazards and COVID-19, including ability to access medical care and take paid leave if they need to self-isolate as a result of contracting COVID-19.
- All work sites to identify potential hazards and actions to be taken in case of emergency.
- Any on-site accommodation to be safe and hygienic, including provision of an adequate supply of potable water, washing facilities, sanitation, accommodation and cooking facilities.
- Workers residing at site accommodation to receive training in preventing prevention of infection through contaminated food and / or water, COVID-19 prevention and avoidance of sexually transmitted diseases.

- Laminated signs of relevant safe working procedures to be placed in a visible area on work sites, in Samoan and English, including on hand hygiene and cough etiquette, as well as on symptoms of COVID-19 and steps to take if suspect have contracted the virus.
- Fair and non-discriminatory employment practices.
- Under no circumstances will contractors, suppliers or sub-contractors engage forced labour.
- Construction materials should be procured only from suppliers able to certify that no forced labour or child labour (except as permitted by the Labour Law) has been used in production of the materials.
- All employees to be aware of their rights under the Labour Law, including the right to organize.
- All employees to be informed of their rights to submit a grievance through the Project Worker Grievance Mechanism. All employees to be provided training on appropriate behaviour with communities, gender-based violence and violence against children.

Project workers will receive OHS training at the start of their employment or engagement, and thereafter on a regular basis and when changes are made in the workplace, with records of the training kept on file. Training will cover the relevant aspects of OHS associated with daily work, including the ability to stop work without retaliation in situations of imminent danger (as set out in paragraph 27 of ESS2) and emergency arrangements.

All Project workers will also receive training on COVID-19 prevention, social distancing measures, hand hygiene, cough etiquette and relations with local community. Training programs will focus, as needed, on COVID-19 laboratory bio-safety, operation of quarantine and isolation centres and screening posts, communication and public-awareness strategies for health workers and the general public on emergency situations, as well as compliance monitoring and reporting requirements, including on waste management, the Project's labour-management procedures, stakeholder engagement and grievance mechanism.

All parties who employ or engage Project workers will actively collaborate and consult with Project workers in promoting understanding of, and methods for, implementation of OHS requirements, as well as in providing information to Project workers, training on occupational safety and health, and provision of personal protective equipment without expense to the Project workers.

Workers' rights to refuse unsafe work environments

Workplace processes will be put in place for Project workers to report work situations that they believe are not safe or healthy. Project workers can remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health. Project workers who remove themselves from such situations will not be required to return to work until necessary remedial action to correct the situation has been taken. Project workers will not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal.

Sexual Exploitation and Abuse and Sexual Harassment

Samoa ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1992. By ratifying CEDAW, Samoa has made a commitment to ensure that the principles for

equality are adhered to and that discriminatory practices including sexual exploitation and abuse and sexual harassment are abolished. Provisions to prevent sexual exploitation and abuse and sexual harassment are included in the [Samoa Public Service Code of Conduct](#) and will also be included in the Code of Conduct for MOH/HSCRM Division's staff (direct workers - other) and for contracted workers in line with relevant national laws and legislation.

7. Workers' Grievance Management

MOH staff working on the Project will have access to the grievance mechanisms established by the national public services. For direct workers – other and contracted workers, a Project specific Workers' Grievance Redress Mechanism (WGRM) consistent with ESS2 will be established and maintained to raise workplace concerns.

Workers will be informed of the grievance mechanism at the time of recruitment. The WGRM will be easily accessible and measures will be put in place to protect workers against reprisal for its use. The WGRM can be used to raise workplace related concerns including about the terms of employment, rights at work, unsafe or unhealthy work situations and others. If the issue cannot be resolved at the workplace level within seven days, it will be escalated to the MOH/HSCRM Division level where one staff member will serve as Grievance Focal Point to file the grievances and appeals. The Grievance Focal Point will coordinate with relevant departments/organizations and persons to address these grievances. The MOH/HSCRM Division will review the records on a monthly basis and report on the grievances, response time and resolution status in a quarterly report to the WB.

The WGRM will operate as follows:

5. The complainant may report their grievance in person, by phone, text message, mail or email (including anonymously if required) to the contractor as the initial focal point for information and raising grievances. For complaints that are satisfactorily resolved at this stage, the incident and resultant resolution will be logged and reported to the MOH/HSCRM Division Focal Point.
6. If the complainant is not satisfied, the contractor will refer the aggrieved party to the MOH/HSCRM Division Focal Point. The MOH/HSCRM Division Focal Point endeavours to address and resolve the complaint and inform the complainant in two weeks or less. For complaints that are satisfactorily resolved by the MOH/HSCRM Division Focal Point, the incident and resultant resolution will be logged by the MOH/HSCRM Division Focal Point. Where the complaint is not resolved, the MOH/HSCRM Division Focal Point will refer to the ACEO for further action or resolution.
7. As a third step, if the matter remains unresolved or the complainant is not satisfied with the outcome, the ACEO will refer the matter to the National Health Grievance Review Committee for a resolution, which will aim to resolve the grievance in three weeks or less. The MOH/HSCRM Division Focal Point will log details of issue and resultant resolution status.
8. If the complaint remains unresolved or the complainant is dissatisfied with the outcome proposed by the National Health Grievance Review Committee, the complainant may refer the matter to the appropriate legal or judicial authority, at the complainant's own expense. A decision of the Court will be final.

The grievance mechanism is not an alternative or substitute for the legal system for receiving and handling grievances and will not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures. While all employees always have the right to access the legal system, the purpose of establishing a grievance mechanism is to provide an accessible and practical means to mediate and seek appropriate solutions, wherever possible.

Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health

Interim guidance
19 March 2020



Background

Health workers are at the front line of the COVID-19 outbreak response and as such are exposed to hazards that put them at risk of infection. Hazards include pathogen exposure, long working hours, psychological distress, fatigue, occupational burnout, stigma, and physical and psychological violence. This document highlights the rights and responsibilities of health workers, including the specific measures needed to protect occupational safety and health.

Health work rights, roles and responsibilities

Health worker rights include the expectation that employers and managers in health facilities:

- assume overall responsibility to ensure that all necessary preventive and protective measures are taken to minimize occupational safety and health risks;¹
- provide information, instruction, and training on occupational safety and health, including;
- refresher training on infection prevention and control (IPC);
- use, putting on, taking off and disposal of personal protective equipment (PPE);
- provide adequate IPC and PPE supplies (masks, gloves, goggles, gowns, hand sanitizer, soap and water, cleaning supplies) in sufficient quantity to those caring for suspected or confirmed COVID-19 patients, such that workers do not incur expenses for occupational safety and health requirements;
- familiarize personnel with technical updates on COVID-19 and provide appropriate tools to assess, triage, test, and treat patients, and to share IPC information with patients and the public;
- provide appropriate security measures as needed for personal safety;
- provide a blame-free environment in which health workers can report on incidents, such as exposures to blood or bodily fluids from the respiratory system, or cases of violence, and adopt measures for immediate follow up, including support to victims;
- advise health workers on self-assessment, symptom reporting, and staying home when ill;

- maintain appropriate working hours with breaks;
- consult with health workers on occupational safety and health aspects of their work, and notify the labour inspectorate of cases of occupational diseases;
- allow health workers to exercise the right to remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health, and protect health workers exercising this right from any undue consequences;
- not require health workers to return to a work situation where there has been a serious danger to life or health until any necessary remedial action has been taken;
- honour the right to compensation, rehabilitation, and curative services for health workers infected with COVID-19 following exposure in the workplace – considered as an occupational disease arising from occupational exposure;
- provide access to mental health and counselling resources; and
- enable cooperation between management and health workers and their representatives.

Health workers should:

- follow established occupational safety and health procedures, avoid exposing others to health and safety risks, and participate in employer-provided occupational safety and health training;
- use provided protocols to assess, triage, and treat patients;
- treat patients with respect, compassion, and dignity;
- maintain patient confidentiality;
- swiftly follow established public health reporting procedures of suspected and confirmed cases;
- provide or reinforce accurate IPC and public health information, including to concerned people who have neither symptoms nor risk;
- put on, use, take off, and dispose of PPE properly;
- self-monitor for signs of illness and self-isolate and report illness to managers, if it occurs;
- advise management if they are experiencing signs of undue stress or mental health challenges that require supportive interventions; and

¹ Including implementation of occupational safety and health management systems to identify hazards and assess

risks to health and safety; IPC measures; and zero-tolerance policies towards workplace violence and harassment.

- report to their immediate supervisor any situation which they have reasonable justification to believe presents an imminent and serious danger to life or health.

Additional resources

[Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control.](#)

[WHO COVID-19 technical guidance](#)

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

Attachment B Guide to develop Code of Conduct for direct workers (other) and contracted workers

A satisfactory code of conduct will contain obligations on all direct workers (other) and contracted workers (including sub-contractors and day workers) that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the region, the location and the project sector or to specific project requirements. The code of conduct shall contain a statement that the term “child” / “children” means any person(s) under the age of 18 years.

The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations
2. Compliance with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Employer’s and Project Manager’s personnel, and the Contractor’s personnel, including sub-contractors and day workers, (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment)
3. Prohibit the use of illegal substances
4. Non-Discrimination in dealing with the local community (including vulnerable and disadvantaged groups), the Employer’s and Project Manager’s personnel, and the Contractor’s personnel, including sub-contractors and day workers (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status)
5. Interactions with the local community, members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions)
6. Sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate)
7. Violence including sexual and/or gender-based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty)
8. Exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power)
9. Protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas)
10. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas)
11. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection)
12. Respecting reasonable work instructions (including regarding environmental and social norms)
13. Protection and proper use of property (for example, to prohibit theft, carelessness or waste)
14. Duty to report violations of this Code

15. Non-retaliation against workers who report violations of the Code, if that report is made in good faith.

The Code of Conduct should be written in plain language and signed by each worker to indicate that they have:

- received a copy of the code;
- had the code explained to them;
- acknowledged that adherence to this Code of Conduct is a condition of employment; and
- understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.

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

Annex VI. Terms of Reference for Technical Advisory

The Terms of Reference for any Technical Advisory contracts should contain the following safeguard clauses as a minimum:

1. Analysis should include the environmental and social aspects and impacts of the proposed TA, consistent with the standards of the World Bank ESF and the Environmental and Social Management Framework (ESMF) of the Samoa COVID-19 Response Project.
2. Outcomes and outputs (such as design, construction methods, training materials, recommendations and advice) should be consistent with the standards of the World Bank ESF of the World Bank and the Environmental and Social Management Framework (ESMF) of the Samoa COVID-19 Response Project.
3. Recommendations must avoid negative impacts of any downstream activities on critical natural habitats and forests.
4. Recommendations must consider the impacts on land acquisition and access and where necessary, include a requirement for minimizing or avoid involuntary land acquisition, involuntary resettlement or involuntary restriction of access to assets. If necessary, the Technical Advisory must require the preparation of a Resettlement Policy Framework (RPF)/Resettlement Action Plan (RAP) for the implementation of any relevant recommendations.
5. Free, prior and informed consultation of potentially affected people, stakeholders and vulnerable groups shall be adequately delivered, gender and youth inclusive and well documented and in compliance with the Stakeholder Engagement Plan (SEP).

Outputs of this contract must be screened by the CTSSU Safeguards Specialist.

Annex VII. Screening Form for Potential Environmental and Social Issues

This form is to be used by the PCU to for screen potential environmental and social safeguards risks and impacts of a proposed subproject, determine the level of risk and the type instrument to be prepared or follow-up action to be taken. It will help the PCU in identifying the relevant Environmental and Social Standards (ESS), establishing an appropriate E&S risk rating for these subprojects 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. Before screening, also check that the activity is not listed in Ineligible Activity List (Chapter 6, Table 6 in the ESMF).

Use of this form will allow the PCU to form an initial view of the potential risks and impacts of a subproject. ***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.

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

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	no		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of health-care facilities and/or waste management facilities?			ESS1	ESIA/ESMP, SEP, GRM LMP
Does the subproject involve land acquisition and/or restrictions on land use?			ESS5	Not Eligible
Does the subproject involve acquisition of assets for quarantine, isolation or medical treatment purposes?			ESS5	Not Eligible
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for health-care waste disposal?			ESS3	ESIA/ESMP, SEP, WMP
Is there a sound regulatory framework and institutional capacity in place for health-care facility infection control and health-care waste management?			ESS1	ESIA/ESMP, SEP, IPC and WMP
Does the subproject have an adequate system in place (capacity, processes and management) to address waste?				IPC&WMP or activity WMP, SEP
Does the subproject involve recruitment of workers including direct, contracted, primary supply, and/or community workers?			ESS2	LMP, SEP
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?				LMP and IP if needed

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	no		
Does the subproject have a GM in place, to which all workers have access, designed to respond quickly and effectively?				Project GRM
Does the subproject 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	ESIA/ESMP, SEP
Does the subproject involve use of security or military personnel during construction and/or operation of health-care facilities and related activities?			ESS4	ESIA/ESMP, SEP
Is the subproject located within or near any ecologically sensitive areas?			ESS6	ESIA/ESMP, SEP
Are there any indigenous groups (meeting specified ESS7 criteria) present in the subproject area and are they likely to be affected by the proposed subproject negatively or positively?			ESS7	Not eligible
Is the subproject located within or near any known cultural heritage sites?			ESS8	ESIA/ESMP, SEP, cultural management plans (not eligible)
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	ESIA/ESMP, SEP
Is there any territorial dispute between two or more countries in the subproject and its ancillary aspects and related activities?			OP7.60 Projects in Disputed Areas	Governments concerned agree

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	no		
Will the subproject and related activities involve the use or potential pollution of, or be located in international waterways ¹² ?			<i>OP7.50 Projects on International Waterways</i>	Notification (or exceptions)

Conclusions:

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

- 2. Proposed E&S Management Plans/ Instruments.**

Remarks.....
.....

Sign by Subproject/activities owner:

Position:Date

Sign by:

Position:Date:.....

¹² 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.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) TEMPLATE

Environmental and social management plan (ESMP) is an instrument that details set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The Borrower will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

The ESMP includes the following components:

Introduction

An overview of the project and the proponent including information such as: i) project name and general description; ii) background; iii) objectives of the ESMP.

Policy and Legal Framework

Brief outline relevant policies, guidelines and laws that apply to the project and the approvals that need to be obtained from different government agencies

Project description and Justification

Brief description of the development proposal including project location and footprint (including maps), summary of key design features, resource requirements and source, predicted type and quantify of waste outputs, work force size and accommodation, and implementation schedule

Brief justification including benefits accruing to the local area, island, country or region; and project relevance in light of local or national development needs

Description of the project area

A brief description of the environmental, socio-economic and cultural characteristics relevant to the project and its area of influence (i.e. focus on sensitive receptors)

Consultation and Information Dissemination

A summary of consultation and information dissemination activities during the ESMP process and including general issues raised, and responses to those issues;

Impact Assessment and Mitigation Measures

The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. The plan will include compensatory measures, if applicable. Specifically, the ESMP:

- a) identifies and summarizes all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement);
- b) describes—with technical details—each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
- c) estimates any potential environmental and social impacts of these measures; and
- d) takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement, indigenous peoples, or cultural heritage).

Environmental Mitigation Plan

Construction Phase					
Activity	Potential Environmental Impact	Proposed Mitigation Measures	Responsibility for Implementation of Mitigation Measures	Period for Implementation of Mitigation Measures	Mitigation Measures Implementation Costs (and who bears it)
1.					
...					
Operational Phase					
1.					
...					
Decommissioning phase (if applies)					
1.					

Monitoring

The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

Monitoring Plan

Construction Phase					
What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored?</i>	When <i>is the parameter to be monitored (time and frequency)?</i>	Who <i>monitors the parameter (responsibility)?</i>	Cost <i>of monitoring the parameter (and who bears it)</i>
1.					
...					
Operational Phase (and decommissioning if applies)					
1.					
...					

Institutional Arrangements, Capacity Development and Training

The ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

Implementation Schedule and Cost Estimates

For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

Annex IX. Environmental criteria for bidding documents

For all TA activities,

Borrowers environmental specialist should work closely with the procurement specialists to make sure that the terms of reference, work plans or other documents defining the scope and outputs of technical assistance activities will be drafted so that the advice and other support provided is consistent with ESSs 1-10.

For all physical works

ESMP mitigation measures and monitoring will be integral part of bidding documentation for works and signed works agreement. The bidding documents will clearly define contractor responsibility for implantation of mitigation measures and practically reflect key monitoring criteria which can be checked during and after works for compliance assurance and ultimately the Contractor's remuneration. Such mitigation measures include the use of Personal Protective Equipment (PPE) by workers on the site, dust generation and prevention, amount of water used and discharged by site, presence of proper sanitary facilities for workers, waste collection of separate types (mineral waste, wood, metals, plastic, hazardous waste, e.g. asbestos, paint residues, spent engine oil), waste quantities, proper organization of disposal pathways and facilities, or reuse and recycling wherever possible, and other identified in ESMP.

WHO Guidance

Advice for the public

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

Technical guidance

- [Infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#), issued on March 19, 2020
- [Recommendations to Member States to Improve Hygiene Practices](#), issued on April 1, 2020
- [Severe Acute Respiratory Infections Treatment Center](#), issued on March 28, 2020
- [Infection prevention and control at health care facilities \(with a focus on settings with limited resources\)](#), issued in 2018
- [Laboratory biosafety guidance related to coronavirus disease 2019 \(COVID-19\)](#), issued on March 18, 2020
- [Laboratory Biosafety Manual, 3rd edition](#), issued in 2014
- [Laboratory testing for COVID-19, including specimen collection and shipment](#), issued on March 19, 2020
- [Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios](#), issued on March 21, 2020
- [Infection Prevention and Control for the safe management of a dead body in the context of COVID-19](#), issued on March 24, 2020
- [Key considerations for repatriation and quarantine of travelers in relation to the outbreak COVID-19](#), issued on February 11, 2020
- [Preparedness, prevention and control of COVID-19 for refugees and migrants in non-camp settings](#), issued on April 17, 2020
- [Coronavirus disease \(COVID-19\) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health](#), issued on March 18, 2020
- [Oxygen sources and distribution for COVID-19 treatment centers](#), issued on April 4, 2020
- [Risk Communication and Community Engagement \(RCCE\) Action Plan Guidance COVID-19 Preparedness and Response](#), issued on March 16, 2020
- [Considerations for quarantine of individuals in the context of containment for coronavirus disease \(COVID-19\)](#), issued on March 19, 2020
- [Operational considerations for case management of COVID-19 in health facility and community](#), issued on March 19, 2020
- [Rational use of personal protective equipment for coronavirus disease 2019 \(COVID-19\)](#), issued on February 27, 2020
- [Getting your workplace ready for COVID-19](#), issued on March 19, 2020
- [Water, sanitation, hygiene and waste management for COVID-19](#), issued on March 19, 2020
- [Safe management of wastes from health-care activities](#), issued in 2014
- [Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus \(COVID-19\) outbreak](#), issued on March 19, 2020
- [Disability Considerations during the COVID-19 outbreak](#), issued on March 26, 2020

WORLD BANK GROUP GUIDANCE

- [Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings](#), issued on March 20, 2020
- [Technical Note: Use of Military Forces to Assist in COVID-19 Operations](#), issued on March 25, 2020
- [ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects](#), issued on April 7, 2020
- [Technical Note on SEA/H for HNP COVID Response Operations](#), issued in March 2020
- [Interim Advice for IFC Clients on Preventing and Managing Health Risks of COVID-19 in the Workplace](#), issued on April 6, 2020
- [Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19](#), issued on April 6, 2020
- [IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic](#), issued on April 6, 2020
- [WBG EHS Guidelines for Healthcare Facilities](#), issued on April 30, 2007

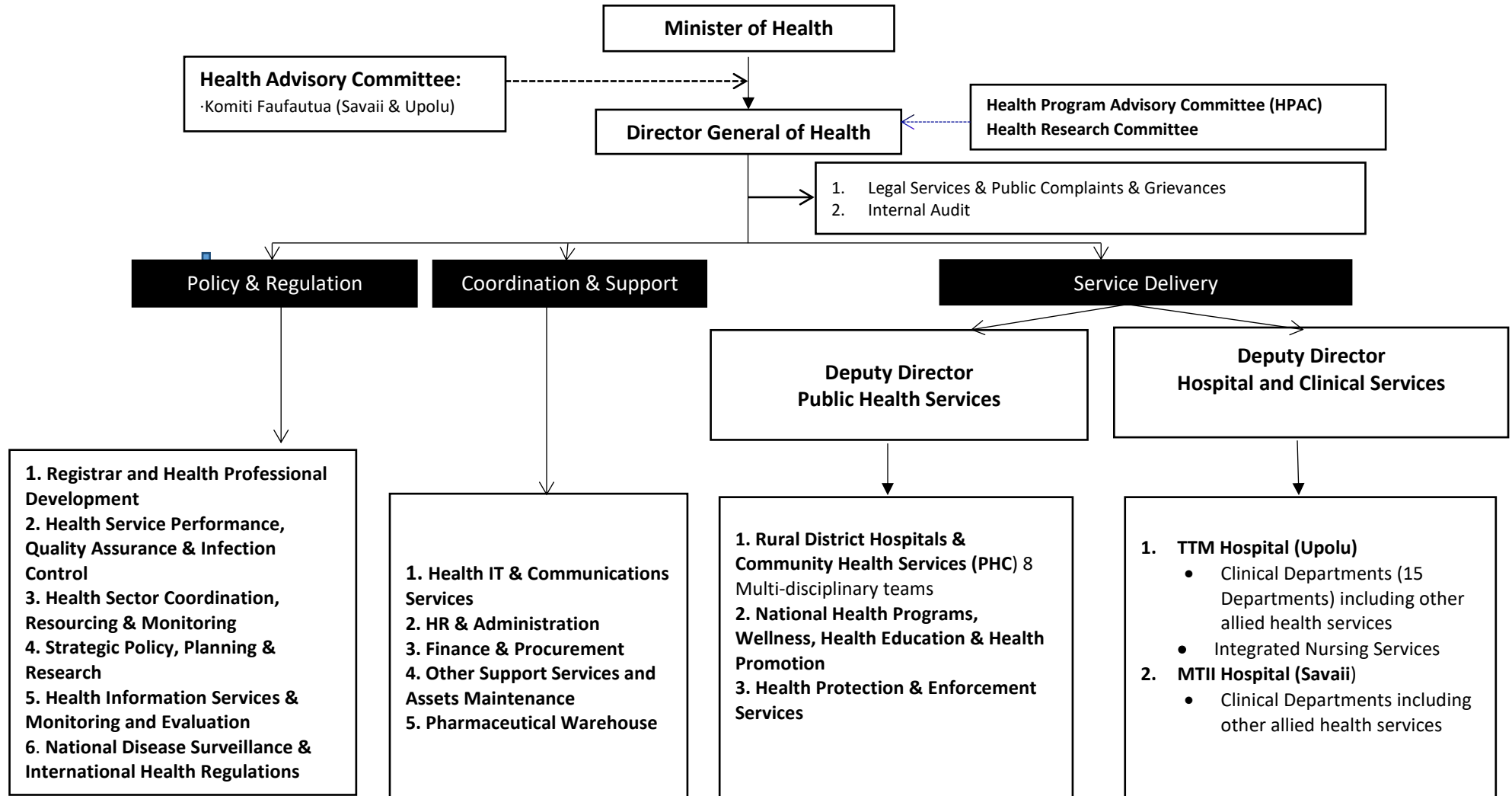
ILO GUIDANCE

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

MFI GUIDANCE

- [ADB Managing Infectious Medical Waste during the COVID-19 Pandemic](#)
 - [IDB Invest Guidance for Infrastructure Projects on COVID-19: A Rapid Risk Profile and Decision Framework](#)
- [KfW DEG COVID-19 Guidance for employers](#), issued on March 31, 2020

Annex XI. Ministry of Health Structure (Cabinet Approved October 2019)



ⁱ Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations Scientific brief, 29 March 2020. Geneva: World Health Organization

ⁱⁱ *ibid*

ⁱⁱⁱ Global surveillance for COVID-19 caused by human infection with COVID-19 virus: interim guidance 20 March 2020. Geneva: World Health Organization <https://apps.who.int/iris/bitstream/handle/10665/331506/WHO-2019-nCoV-SurveillanceGuidance-2020.6-eng.pdf>

^{iv} <https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/> (accessed 20 April 2020)

^v Guide to local production: WHO recommended handrub formulations. Geneva: World Health Organisation; 2010. http://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf.

^{vi} PHE poster PPE TBC

^{vii} Severe acute respiratory infections treatment centre: practical manual to set up and manage a SARI treatment centre and SARI screening facility in health care facilities. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/SARI_treatment_center/2020.1). (p55-56)

^{viii} *ibid*

^{ix} CDC Strategies to Optimise the Supply of PPE and Equipment <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html> <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html> (Accessed 21 April 2020)

^x CDC Strategies to Optimise the Supply of PPE and Equipment <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html> <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html> (Accessed 21 April 2020)

^{xi} CDC Strategies to Optimise the Supply of PPE and Equipment <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html> <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html> (Accessed 21 April 2020)

^{xii} Infection prevention and control during healthcare when COVID-19 is suspected, Interim guidance 19 March 2020, Geneva: World Health Organization [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125) (Accessed 20th April 2020)

^{xiii} World Health Organization. (2014). Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care. World Health Organization. <https://apps.who.int/iris/handle/10665/112656>

^{xiv} <https://www.who.int/infectionprevention/publications/decontamination/en/>

^{xv} Infection prevention and control during healthcare when COVID-19 is suspected, Interim guidance 19 March 2020, Geneva: World Health Organization [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125) (Accessed 20 April 2020)

^{xvi} Infection prevention and control during healthcare when COVID-19 is suspected, Interim guidance 19 March 2020, Geneva: World Health Organization [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125) (Accessed 20th April 2020)

^{xvii} Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance 23 April 2020 https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf (accessed 23 April 2020)

^{xviii} Guidelines for drinking-water quality, fourth edition, incorporating the first addendum. Geneva: World Health Organization; 2017 (<http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf>)

^{xix} Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance 23 April 2020 https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf (accessed 23 April 2020)

^{xx} [https://www.who.int/publications-detail/infectionprevention-and-control-during-health-care-whenovel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infectionprevention-and-control-during-health-care-whenovel-coronavirus-(ncov)-infection-is-suspected-20200125)

^{xxi} Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance 23 April 2020 https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf (accessed 23 April 2020)

^{xxii} <https://www.cdc.gov/hai/pdfs/resourcelimited/environmental-cleaning-508.pdf> (Accessed 20 April 2020)

^{xxiii} Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance 23 April 2020 https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf (accessed 23 April 2020)

^{xxiv} CDC and ICAN. Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings. Atlanta, GA: US Department of Health and Human Services, CDC; Cape Town, South Africa: Infection Control Africa Network; 2019. Available at: <https://www.cdc.gov/hai/prevent/resource-limited/environmental-cleaning.html> and <http://www.icanetwork.co.za/icanguideline2019/> (accessed 18 April 2020)

^{xxv} Severe acute respiratory infections treatment centre: practical manual to set up and manage a SARI treatment centre and SARI screening facility in health care facilities. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/SARI_treatment_center/2020.1). CDC and ICAN. Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings, *ibid*.

^{xxvi} Infection prevention and control during healthcare when COVID-19 is suspected, Interim guidance 19 March 2020, Geneva: World Health Organization [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125) (Accessed 20th April 2020)

^{xxvii} Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance 23 April 2020 https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf (accessed 23 April 2020)

^{xxviii} Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. <https://apps.who.int/iris/bitstream/handle/10665/42175/9241545259.pdf?sequence=1>

^{xxix} Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. <https://apps.who.int/iris/bitstream/handle/10665/42175/9241545259.pdf?sequence=1>

^{xxx} Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. <https://apps.who.int/iris/bitstream/handle/10665/42175/9241545259.pdf?sequence=1>

^{xxxi} Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. <https://apps.who.int/iris/bitstream/handle/10665/42175/9241545259.pdf?sequence=1>

^{xxxii} Safe management of wastes from health-care activities. Geneva; World Health Organisation; 2014. <https://apps.who.int/iris/bitstream/handle/10665/42175/9241545259.pdf?sequence=1>

^{xxxiii} Severe acute respiratory infections treatment centre: practical manual to set up and manage a SARI treatment centre and SARI screening facility in health care facilities. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/SARI_treatment_center/2020.1).

^{xxxiv} ISWA Waste Management During the COVID-19 pandemic ISWA's Recommendations, 8 April 2020 (Accessed 24 April 2020)

^{xxxv} ISWA Waste Management During the COVID-19 pandemic ISWA's Recommendations, 8 April 2020 (Accessed 24 April 2020)