GOVERNMENT OF ST. VINCENT AND THE GRENADINES

Environmental and Social Management Plan (ESMP)

Building Retrofit for Argyle Isolation Facility

Saint Vincent and the Grenadines

OECS Regional Health Project (P168539)

MINISTRY OF HEALTH, WELLNESS AND THE ENVIRONMENT

30 June, 2020

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Acronyms

AIF	Argyle Isolation Facility
CARPHA	Caribbean Public Health Agency
CDC	Centers for Disease Control and Prevention
CERC	Contingency Emergency Response Component
CMO	Chief Medical Officer
CUBC	Caribbean Uniform Building Code
CWSA	Central Water and Sewerage Authority
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EMS	Emergency Medical Service
EMT	Emergency Medical Technician
ESMF	Environmental and Social Management Framework
ESHS	Environment, Social, Health and Safety
ESMP	Environmental and Social Management Plan
FELTP	Field Epidemiology Laboratory Training
GoSVG	Government of Saint Vincent and the Grenadines
GRM	Grievance Redress Mechanism
HEPA	High Efficiency Particulate Air
MCMH	Milton Cato Memorial Hospital
MOHWE	Ministry of Health Wellness and the Environment
NBWP	National Biomedical Waste Plan
OECS	Organization of Eastern Caribbean States
OECSRHP	OECS Regional Health Project
PAHO	Pan American Health Organization
PPE	Personal Protective Equipment
SVG	Saint Vincent and the Grenadines

WBG	World Bank Group
WHO	World Health Organization

Chapter 1. Introduction and Background

The Government of Saint Vincent and the Grenadines (GoSVG) is implementing the OECS Regional Health Project (OECSRHP) with funding from the World Bank Group (WBG). The objectives of the Project are to improve the resilience of the health system and to improve the responsiveness of health service delivery during public health emergencies. The Project consists of four components as follows:

1. Improved Health Facilities and Laboratory Capacity
2. Strengthening Public Health Surveillance and Emergency Management
3. Institutional Capacity Building, Project Management and Coordination
4. Contingency Emergency Response Component (CERC)

Overall, the components of the OECSRHP, are the establishment of a National Public Health Laboratory, improved capacity building in public health surveillance and project management, and building institutional capacity in health emergencies preparation and response. Under the latter category, efforts are to include Emergency Equipment - to enhance health emergency and disaster response efforts - such as mobile mass casualty response vehicle retrofitted to act as part of the Advanced Medical Post, mobile decontamination chambers, stretchers, small equipment and supplies. Details of the project and its components can be found on the GoSVG[1] and WBG[2] websites for the project.

In response to the global pandemic, COVID-19, the GoSVG is enhancing its capacity to care for patients with the virus and mitigate and control the spread of the virus. These activities include the retrofitting a two-storey concrete structure to be converted to an isolation facility for the care and treatment of COVID-19 positive patients, retrofitting of a single-storey facility to provide ten (10) rooms to accommodate staff, an eating area and a laundry area. The facility will be known as the Argyle Isolation Facility (AIF).

The environmental and social risks of this activity are addressed under the Environmental and Social Management Framework (ESMF) for the project, as amended to include additional safety measures for the pandemic under the Contingency Emergency Response Component (CERC).[3]

Based on the screening conducted for this project (see Annex 1) an Environmental and Social Management Plan (ESMP) is required to identify and appropriately manage environmental and

[1] http://www.gov.vc/index.php/business/regulations/54-government/national-projects/1051-oecs-regional-health-project

[2] https://projects.worldbank.org/en/projects-operations/project-detail/P168539

[3] The Environmental and Social Management Framework (ESMF) for the OECSRHP in Saint Vincent and Grenadines can be found at: http://www.gov.vc/images/pdf_documents/SVG_-ESMF-for-OECS-projects_May-10.pdf

social risks. This ESMP is prepared to provide processes that the implementing agencies (Local Government Authorities and Healthcare Facilities Management) will follow to ensure the protection of healthcare workers, waste handlers, and the community from environmental and social risks associated with the Isolation facility. The risks associated with the AIF relate to waste management, infection control, health and safety, and timely and clear public information. The ESMP will ensure that the retrofitting of the ACIU is done in compliance with national and regional environmental regulations, and consistent with international best practices and World Bank safeguards policies, and the environmental and social management framework created for the project.

The AIF has been retrofitted and the GoSVG is seeking retroactive reimbursement for costs incurred. To achieve this, this ESMP provides an update of the status of the project, due-diligence of the works accomplished to date, and the evidence and certification that the AIF has and will continue to be undertaken in compliance with applicable safeguards requirements.

This ESMP will be disclosed on the GoSVG website and the records of the disclosure will be documented and recorded.

Chapter 2. Project Description

2.1 Project Scope and Context

The AIF will be country's first standalone isolation facility for the treatment of persons with infectious diseases. The facility will provide care for patients suffering with COVID-19. The facility will be outfitted with all necessary medical equipment, furniture and fittings and ancillary structures. It will be staffed with the necessary medical personnel which will include doctors, nurses including registered nurses and nursing aides, and other ancillary staff.

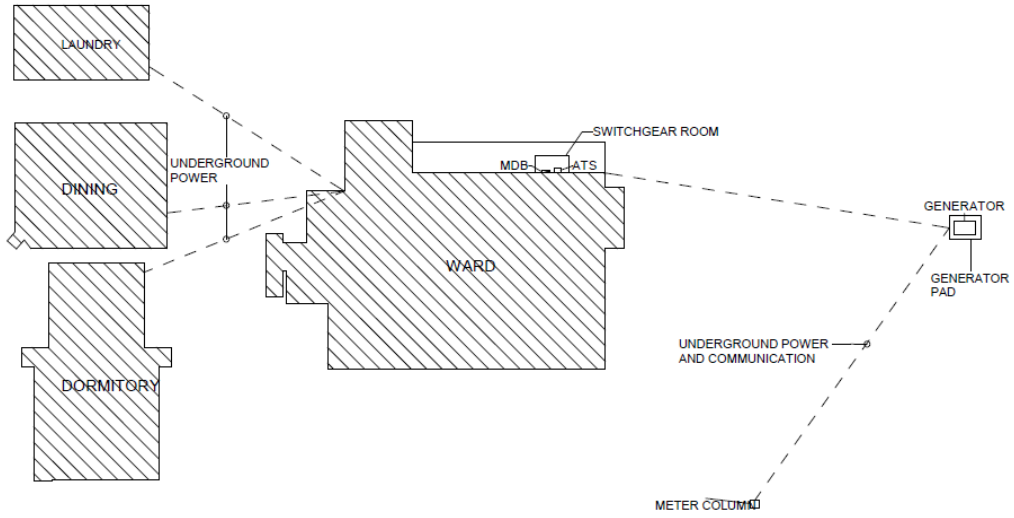
Figure 1: Location of Isolation facility

2.2 Project Design

2.2.1 Location and Layout

The isolation facility is situated at Mt. Pleasant, Argyle on the north eastern cost of the island. The facility consists of four buildings. (see Figure 2)

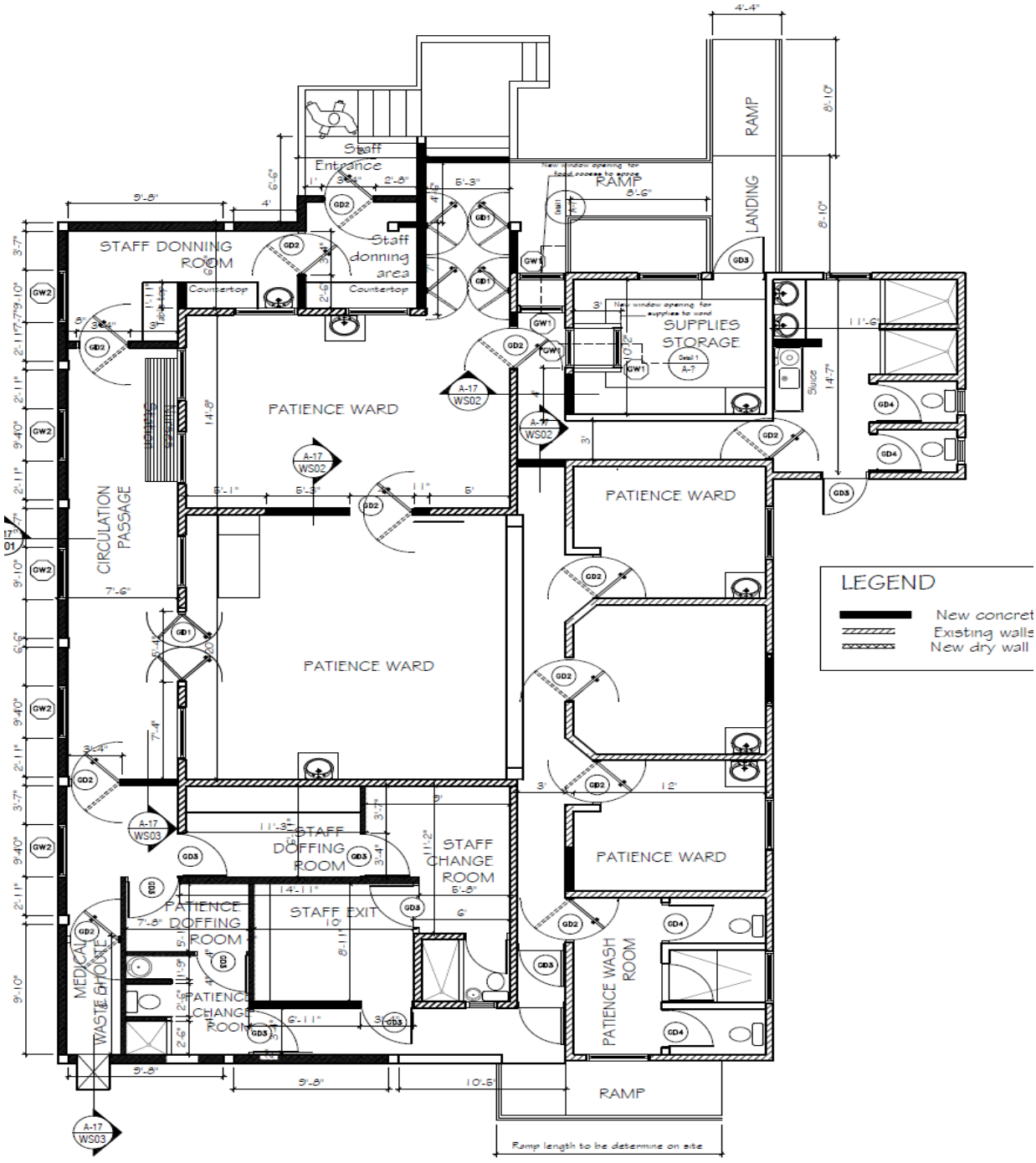
Figure 2: layout of Isolation Facility



The building labelled "WARD" is a private residence converted to an isolation facility. The works at the retrofitted facility included the removal of interior partitions to create additional floor space in the isolation units, replacing timber-framed doors and windows, replacing existing floor tiles, ventilation system, waste disposal, plumbing and electrical fixtures. The land clearance that was undertaken was minimal as there were no trees removed or trimmed to create parking space. The yard area was paved with concrete to create parking and walk ways. The ward area is a retrofitted two-storey concrete structure of about 4,000 square feet (Figure 3). The floors are gender specific with the first floor providing care for male patients and the ground floor for female patients. On each floor there are donning and doffing areas, a nurses' station and dressing and storage rooms.

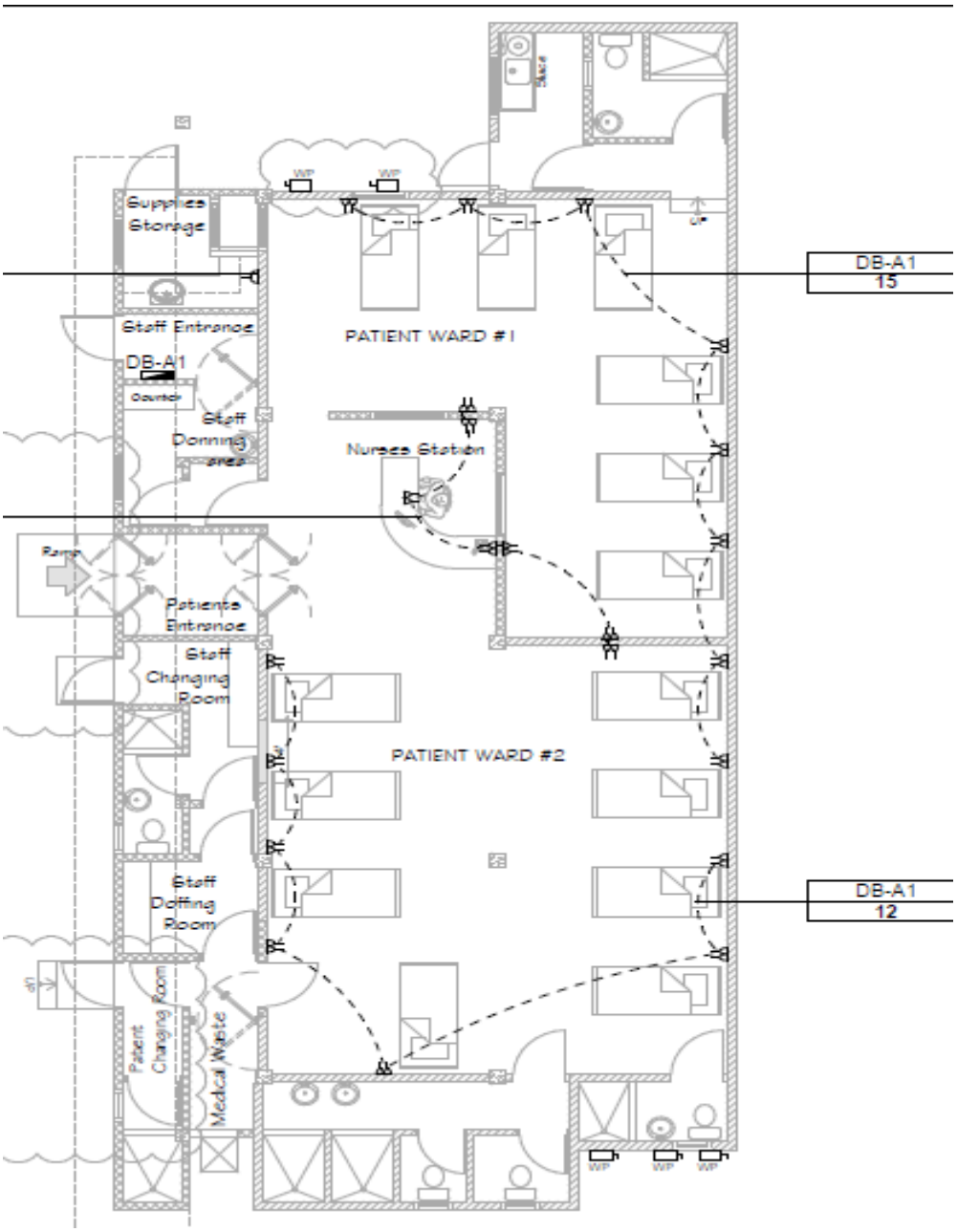
On the first floor, 10 beds are allotted to moderate patients and three (3) individual rooms are assigned to severe patients. There is a nurses' station on the outer section of the wards for administrative duties. There are four (4) patient toilets and three (3) showers; there are two (2) additional bathrooms in the doffing are – one (1) for staff and the other for discharged patients.

Figure 3: First floor isolation centre



On the ground floor there are ten (10) beds distributed between two separate units. Unit one has six (6) beds and one (1) shower/toilet room while unit two has six (6) beds, one (1) shower/toilet room and a larger bathroom containing two (2) single toilets as well as two (2) single showers.

Figure 4: Ground floor of isolation centre



The building labelled “Dormitory” in Figure 2 contains 10 individual rooms with ensuite shower and toilet.

Figure 5: photograph of Nurses quarters

The building labelled “Dining” is equipped with a kitchen area containing an area to wash utensils, a four-burner stove and a refrigerator, a dining area as well as two toilets. There are two (2) additional ensuite sleeping quarters attached to this unit.

Figure 6: photograph of Dining building

The building labelled laundry will house the laundry equipment to be used for patient linen.

Figure 7: Photograph of laundry building

2.2.2 Air supply/ventilation

At the AIF, standard air conditioning units were installed in all of the air-conditioned spaces. However, in the COVID-19 patient spaces/wards a negative pressure air machine is installed. Generally, a negative pressure air machine acts like an air scrubber, which removes potentially dangerous particles from the air through a series of filters; this helps to prevent occupants from breathing in the air contaminants. The negative pressure air machine uses ducting to remove tainted air from a closed controlled area. The filtered air is exhausted outside of the controlled area and creates negative air pressure (a vacuum effect) inside the controlled area, therefore restricting the spread of contaminants to other areas inside the building.

The air filtration process goes through five stages to make it free of contaminants, firstly, the air passes through a UV-C filter which works by emitting UV-C light that destroys the DNA of micro-organisms such as bacteria and viruses. At this point the microbe is either killed or rendered unable to multiply.

The second stage of filtration sees the air pass over a standard large particle filter. This filter is used to keep dust and large airborne particles from entering the finer filters, thus extending the working life of the finer filters.

The third stage of filtration moves the air through a MERV 11 rated air filter. This filter removes up to 80 percent of all particles between 1 – 3 microns. The current situation being dealt with is COVID-19, whose transportation particles are within the size range; 80 percent of these will be captured by this filter and go no further through the machine. It should be noted that due to the particles being captured here having first passed the UV-C light, they will be already dead at this point; but are captured by the filter as an additional layer of precaution.

The fourth and final stage of filtration is a HEPA filter. A HEPA filter is a “High Efficiency Particulate Air” filter. This filter will trap 99.97% of all particles between 0.3 microns to 1.0 micron. Effectively, this filter will trap the 20% of the particles of concern that may have passed the third filtration stage. Again, any biological trapped here would have already been killed by the UV-C filter and is being trapped here as an additional layer of precaution.

Finally, the air that has been extracted from the building will then be ejected from the machine outside into the atmosphere after being fully cleaned and sanitized by the above filtration methods. Therefore, the air that is released into the atmosphere is free of contaminants.

2.2.3 Access to facility

- Only authorized personnel will be allowed to enter the facility.
- Perimeter fencing - enclosed using brick and chain link fencing.
- One primary entrance in and out
- 24- hour security and access control point. Private Security company recommended. Minimum of two (2) security personnel will be present on site at all times. One (1) will be stationed at the gate at all times and should maintain a log of the entry and exit of occupants. The other security officer will patrol the grounds of the facility.
- Parking space including access by ambulance
- PWD access on both floors however no bathroom considerations
- Ease of access for delivery of food/medical and other supplies

2.2.4 Liquid Waste Management

There were existing septic tanks and soak systems situated at various locations on the project site these will be used to store and treat liquid waste generated at the AIF. Additional septic tank and soakaway systems have been installed, particularly for the newly constructed staff quarters in order to accommodate the expected increased volume of waste water to be handled at the isolation facility. All of the septic tanks and the associated sewer lines and soak away systems are sealed and are sub-surface. The only surface water that is likely to be channelled from the facility into the nearby public drain is storm water – i.e. run off from rain fall. The grey water generated from the laundry and bathrooms will be channelled directly into a tile field/soakaway type system.

A coldwater supply plumbing system was installed at the facility. The existing plumbing and drainage system were improved with the construction a new soakaway. The new system will accommodate all waste water from the wash basins, bathrooms and laundry. There are no existing or newly constructed floor drains that will be emptied out into open canals or ditches.

2.2.5 Solid and Medical Waste

For the management of solid waste several bins will be placed in strategic locations in and around the facility – i.e. general areas, donning and doffing rooms, isolation rooms, kitchen, bathrooms, and in the ancillary buildings. These bins will be emptied at appropriate intervals to be determined by area of use and cleaned and sanitised with appropriate disinfectant (e.g. calcium hypochlorite 70% or sodium hypochlorite 5%) as necessary before being replaced for further use. Wastes will be segregated – non-medical waste will be stored in designated collection containers while medical waste will be placed in especially marked/coded storage containers. All bins will be kept covered and easily accessible at all times. Non-medical wastes will be collected via the usual arrangements

for the area (collection on a specified day) while medical waste will be transported separately for careful disposal at the sanitary landfill (medical waste is buried) or incinerated and then residual waste removed for burial at regular intervals.

Additional information on biomedical waste management is found in chapter 5 of this ESMP.

2.2.6 Additional equipment and supplies

There would be various equipment to use in the detection of COVID 19, the equipment for detection will not be housed at the centre. The number of equipment will vary and depend on the number of persons at the AIF.

The basic equipment for the AIF is listed in Annex 4.

A backup generator will be used (Figure 8).

Figure 8: Back-up generator

The SDMO J88K is designed for either industrial use or standby use. It is ideal for home and office backup or single-phase site work. It uses leading edge technology and is designed for regular, intensive use that is powerful and quiet.

Prime Rating PRP: 64kW/80kVA, Standby Rating ESP: 70kW/88kVA - 127A Standby rating.

Powered by a JOHN DEERE 4045TF220 1500rpm mechanically governed diesel engine and coupled to a Kohler three phase AVR alternator, this generator is very reliable, quiet and produces a clean power suitable for powering sensitive equipment. The generator benefits form a 180L bunded tank giving the following consumptions, @100% load 19.5 L/hr, @75% load 14 L/hr & @50% load 10 L/hr.

This set is very quiet, with a fully soundproofed canopy that keeps the acoustic levels down to 64dBA @7m or 94dBA LWA.

The TK26M uses the APM303 Control Panel which is a versatile unit that can start the generator in manual or automatic mode. It offers the following measurements: phase-to-neutral and phase-to-phase voltages, fuel level, active power currents, effective power, power factors, Kw/h energy meter, oil pressure and coolant temperature levels. The generator also has an internal battery charger to allow the set to be left in Auto mode

2.3 Project Status

The AIF was constructed at a cost of approximately, US$610,000.00. This cost includes the repair and retrofitting of the two existing concrete structures, the construction of the laundry and dining buildings, installation of AC units and HEPA ventilation system and the cost of erecting the fence around the entire facility.

Construction of the AIF is complete and the GoSVG is seeking retroactive reimbursement for costs incurred. To achieve this, this ESMP provides a due-diligence of the works accomplished to date, and the evidence and certification that the AIF has and will continue to be undertaken in compliance with applicable safeguards requirements. This information appears in Annex 5.

This due-diligence is based on a review of the available information related to the AIF, and a site visit by the Safeguards Specialist(s) assigned to the project by the GoSVG. It provides assurances that the project has been designed and constructed in conformance that the appropriate safeguards mitigation measures have been done as detailed in the ESMP. It also identifies any exceptions and provides a time frame to correct them as necessary.

Figure 9: Final picture of the facility

Chapter 3. The Legal and Administrative Framework

3.1 National Law

Saint Vincent and the Grenadines has promulgated numerous laws, regulations, and policies that are relevant to health facilities. For a thorough discussion of these, please refer to the ESMF document. The various ministries and agencies and their respective roles are also described in the ESMF.
The following laws will guide the process of the AIF operations

Land Acquisition (1947)
This Act provides for the acquisition of land for public benefit. The government has the power under this Act to acquire land for projects which are intended to benefit the general public.

Waste Management Act (2000)
This Act contains rules for the public management and disposal of solid waste and including hazardous waste, and provides for appointment, functions, etc. of the National Solid Waste Management Authority.

Specific to the AIF, the Environmental Services Act No 14 of 1991 and the Solid Waste Management Act No 31of 2000 controls biomedical waste in Saint Vincent and the Grenadines. In addition, a National Biomedical Waste Plan (NBWP) was developed in 2002 as part of a program to address problems associated with ship-generated wastes, and is to be updated as part of the OECSRHP. It is described in section 3.1.1 below.

3.1.1 National Biomedical Waste Management Plan

The NBWP describes proposed measures and practices for waste classification, minimization, segregation, labelling, storage, transport, treatment (long term, short term), waste pit design, areas of landfills receiving wastes, and training. The NBWP is incorporated by reference to this ESMP as a guideline for national waste management regulations, and will be updated to follow best practices in light of COVID-19.

While the implementation of the plan presently may not be in full effect, there are some aspects of the plan that are being utilized at the main health facilities within the country, such as the Milton Cato Memorial Hospital (MCMH) and Modern Medical Complex in Georgetown. Hence, a similar approach for biomedical waste management will be expected at AIF.

In any case, the proper management of the biomedical waste, according to the draft plan, depends on good administration and organization. At the national level, biomedical waste management is generally under the principal authority of the Ministry of Health Wellness and the Environment (MOHWE). Based on the draft plan, all health care facilities should have a person or group responsible for management of the biomedical waste, including the implementation of waste management plans. Ideally, that person or group should be the infection control officer or infection control committee so that the management of the waste can be incorporated into policies, procedures, and programmes to minimize the risk of spreading infections within the facility thereby protecting patients, health care worker, and the public.

Nationally, the collection of all waste, including biomedical waste, comes under the sole jurisdiction and responsibility of the Solid Waste Management Unit (Central Water and Sewage Authority). Hence, it is imperative that any waste management plan or programme at any such health care facilities should be done in concurrence with that entity (CWSA).

3.1.2 The Occupational Health and Safety Act (2017)

This Act applies only to industrial establishments belonging to or occupied by the Crown unless as otherwise expressly provided in the Act. It establishes an Advisory Council on Occupational Safety and Health responsible for: advising the Minister on matters relating to occupational safety and health or any issue arising out of the implementation of the Act including formulation of a national policy on occupation safety and health; making recommendations to the Minister relating to programmes in occupational safety and health including enforcement and implementation of a national policy on occupational safety and health; and, to promote public awareness of occupational safety and health. The Act also allows for the appointment of a Chief Inspector and a number (to be determined) inspectors or other public officers for the administration and enforcement of the Act. The Act empowers inspectors to administer and enforce the provisions of the Act.

3.2 World Bank Social and Environmental Safeguards

Safeguard Policies

The WBG has developed Safeguards Policies that guide the development of projects including the OECSRHP. Most relevant to the Retrofitting is OP4.01 (Operational Policy 4.01), which requires environmental and social assessment of any proposed project. Accordingly, the ESMF was prepared for the OECSRHP as a general guidance document, and currently this ESMP has been prepared for the specific activity of clinic retrofitting/rehabilitation.

Several additional safeguards policies cover aspects such as land acquisition, public disclosure, natural habitat, and antiquities protection, among others. For a thorough discussion of these, please refer to the ESMF document or the WBG website.[4]

EHS Guidelines

Environmental, Health and Safety guidelines have also been prepared by the WBG. There are general guidelines that cover most activities related to construction projects for new facilities. Some parts of these general guidelines are applicable to the retrofitting activity, particularly such aspects as traffic safety, dust and noise control, worker health and safety, and control of runoff from work sites.

Also relevant to the retro fitting activity are the sector-specific WBG guidelines for Health Care Facilities, which cover waste minimization, waste segregation, handling and storage of wastes on site, transport to external facilities, and options for treatment and disposal. For more information refer to the EHS Guidelines on the WBG website under the category of Health Care Facilities.[5]

3.3 International standards

The Caribbean Public Health Agency (CARPHA), the Pan American Health Organization (PAHO), the World Health Organization (WHO), and the Centers for Disease Control and Prevention (CDC) have issued several guidance documents specific to the health sector, including the activities that will fall under the CERC-ESMF. In addition, there are protocols dealing with potential exposure to infectious agents, such as COVID-19. Particularly relevant are the following:

- Standard Operating Procedures (SOPs) for the negative pressure air handling and/or filtration systems. The SOPs for this would have been supplied with the equipment along with the necessary maintenance safety information (Annex 6).
- Guidance on Management of Solid Health-care Waste at Primary Health-care Centres[6]
- Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings[7]
- WBG Guidelines for Health Care Facilities[8]

Caribbean Public Health Agency (CARPHA)

[4] https://projects.worldbank.org/en/projects-operations/environmental-and-social-policies
[5] https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines
[6] http://www.who.int/water_sanitation_health/publications/manhcwm.pdf
[7] https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html
[8] https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

On March 11, 2020, the World Health Organization (WHO) announced that this outbreak is a pandemic). The rapidly evolving situation now requires a shift in mindset in all countries from preparedness to readiness and rapid response. CARPHA has upgraded the risk of disease transmission to the Caribbean Region to **Very High**. CARPHA is working closely with CARPHA Member States (CMS) and Caribbean coordinating partners and mechanisms to respond to the threat and to prepare CMS to prevent further transmission from exported cases if they were to happen in countries. Key actions by CARPHA to date[9]:

- CARPHA has activated its Incident Management Team (IMT) and is coordinating the Regional preparedness and response to this new incident.
- CARPHA has issued Situation Reports (SITREPS) to CARPHA Member States (CMS) and other regional stakeholders
- Travellers' guidelines have been developed and shared with stakeholders
- Air and seaport guidelines have been disseminated
- Press releases have been shared with the media and other regional stakeholders
- The Security Cluster has been activated for tracking of passengers from China through IMPACS

3.3.2 Pan American Health Organization (PAHO)

The Pan American Health Organization (PAHO) has developed specific technical guidance for COVID 19[10]:

- Biosafety
- Clinical Management
- Detection and Diagnosis
- Disability related information
- Ethics
- Emergency Medical Teams (EMT) – Medical Surge
- Essential Medicines
- Prehospital Emergency Medical Services Readiness
- Health Workers
- Health Services
- Health Aging
- Hospital Readiness
- Infection Prevention and Control
- Medical Devices
- Requirements and Technical Specifications – PPE

[9] https://www.carpha.org/What-We-Do/Public-Health/Novel-Coronavirus
[10] https://www.paho.org/en/technical-documents-coronavirus-disease-covid-19

- Risk Communication
- Social distancing and travel related measures
- Surveillance
- Water sanitation

3.3.3 World Health Organization (WHO)

WHO works worldwide to promote health, keep the world safe, and serve the vulnerable. Its goal is to ensure that a billion more people have universal health coverage, to protect a billion more people from health emergencies, and provide a further billion people with better health and well-being. Specific to COVID 19 the WHO has developed country and technical guidance[11]:

- Critical preparedness, readiness and response actions for COVID 19
- Country-level coordination, planning and monitoring
- The Unity Studies: Early Investigations Protocols
- Risk communication and community engagement
- Naming the coronavirus disease (COVID 19)
- Surveillance, rapid response teams, and case investigation
- Clinical care
- Essential resource planning
- Virus origin/Reducing animal-human transmission
- Humanitarian operation, camps, refugees/migrants in non-camps and other fragile settings
- National laboratories
- Infection prevention and control / WASH
- Guidance for schools, workplace & Institutions
- Points of entry / mass gatherings
- Health Workers
- Maintaining Essential Health Services and Systems

[11] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance

Chapter 4. Potential Environmental and Social Impacts

General information of environmental and social baseline conditions relevant to the clinic rehabilitation is provided in the project ESMF document for Saint Vincent and the Grenadines.

Notwithstanding the numerous positive benefits, there is also a risk of negative impacts in the social and environmental areas if certain activities are not appropriately managed. The sections below describe those potential negative impacts from the perspective of retrofitting the facility for COVID-19, operating it, and shutting down the facility after it is no longer needed. Anticipated risks and their mitigation are discussed in this chapter and in Chapter 5.

4.1 Design and Construction

The selection of a site must take into account land ownership and community safety. Given that the CERC objective is to support immediate priority activities, the activities or subprojects with resettlement issues were avoided.

Site selection:
Based on international guidelines, the location was chosen due to its remoteness, the AIF is a refurbished stand- alone house and other auxiliary units at the south east end of the island. The land and buildings are leased from a private holder as per contract 894/2020 (Annex 6) signed by both parties at market rates for the land and any building. The status of land ownership is "lease to own". Given that the site is NOT an existing government building, the completion of the *as built* drawings will determine infringement of boundaries and possible land acquisition. Under the parent project the resettlement policy was not 'triggered' so if new lands must be acquired World Bank procedure will be followed for the permanent acquisition of property.

Once a site is being prepared, attention was paid to avoid impacts such as controlling runoff, having safe areas for waste storage bins or receptacle storages, and adequate facilities for the collection, storage and eventual treatment of sanitary wastewater. Standard measures to avoid impacts from traffic safety, dust, and noise were observed, as well as those dealing with occupational health and safety for site workers. Areas with diesel generators may also be used for power or emergency back-up, requiring adequate ventilation, fuel storage, and safety measures. As well, construction waste and debris were required to be disposed of properly.

The works for the facility retrofit and rehabilitation have already been accomplished. Any remaining risks that have not been properly identified and addressed are discussed and evaluated

in Annex 5 of this ESMP. Items that remain pending to be completed are also identified in Annex 5. This includes the following:

- Replacement of doors to enable easier access into and out of the isolation units with minimal contact;
- Installation of CCTV to accommodate off-site monitoring of patients;
- Enclosure of the nurses' stations.

The pending items form the Action Plan and will adhere to the schedule and dates in Annex 5.

4.2 Operation

Once operational, the facility will have biomedical waste which will require proper treatment and disposal. These will include sharps, infectious wastes, chemical or pharmaceutical waste, as well as non-hazardous or general waste.

The health and safety of health care workers could be affected by improper /inadequate waste management practices as well as by hygienic conditions, isolation and storage procedures for bio-infectious, radiologic or genotoxic waste. Air conditioners and filtration systems must be operated and maintained properly, and the filters treated as biomedical waste.

The use of personal protective equipment (PPE) or medical supplies will also need proper management and disposal. The entrance and exit of trucks or vehicles carrying supplies will require access controls and security clearance. The security at the facility will need to be enhanced by barrier mechanisms such as fencing to prevent unauthorized access and keeping the general public out.

Operation of the negative air pressure system is also a source of risk if not properly done. Handling of the filters must follow the SOPs for the equipment (please see Annex 5). Filters should be treated as medical waste. The UV lights in the system may also cause damage to persons eyes. Liquid waste disposal systems (septic tanks and soakaways) must be checked periodically and maintained to prevent overflow or leakage.

Discharge Criteria for Confirmed COVID-19

Patients meeting the following criteria can be discharged:

- Afebrile for >3 days
- Improved respiratory symptoms
- pulmonary imaging shows obvious absorption of inflammation

- nucleic acid tests negative for respiratory tract pathogen twice consecutively (sampling interval ≥ 24 hours). CARPHA recommends a swab at day 14 and another at day 21.
- For symptomatic patients after the resolution of symptoms, samples should be collected at least seven days after the onset or after > 3 days without fever.
- For asymptomatic SARS-CoV-2-infected persons, the tests to document virus clearance should be taken at a minimum of 14 days after the initial positive test.

After discharge, patients are recommended to continue 14 days of isolation management and health monitoring, wear a mask, live in a single room with good ventilation, reduce close contact with family members, eat separately, keep hands clean and avoid outdoor activities. It is recommended that discharged patients should have follow-up visits after 2 and 4 weeks.

4.3 Decommissioning

The isolation facility is an integral part of the health system of the Ministry of Health for the treatment of infectious disease. After the facility ceases to operate as an active isolation facility, AIF must be adequately sanitised, waste materials removed and disposed of, and supplies and equipment must be sanitised and safely stored and maintained for future use.

Chapter 5. Mitigation Measures

This section of the ESMP provides the mitigation measures to address each of the risks identified in the previous chapter. For the construction phase they are meant as a checklist for the due-diligence in Annex 5, and for the operation and decommissioning phases they are meant as a plan to guide future efforts. The mitigation measures include the following:

1. Management of environmental and social issues related to the operation of the facility.
2. Disposal of construction waste and debris, control of noise, dust and traffic, control of runoff, restrictions of public or visitor access or entry, occupational health and safety for workers.
3. Procedures for bio-medical waste management on site, liquid and solid wastes, autoclaves, incineration sites, waste pits, landfills, and/or other disposal locations.
4. Maintenance and care standards for biomedical waste treatment equipment, i.e. autoclave and incinerator, air handling and filtration equipment, wastewater collection and disposal systems.
5. Standard Operating Procedures (SOP) and engineering options for infection control such as quarantine and voluntary self-isolation procedures, contact and airborne precautions, cleaning and disinfection procedures, monitoring and managing exposed healthcare personnel.
6. Training on occupational health and safety (equipment operations, Personal Protective Equipment) for public health staff, visitors and workers.
7. Reporting requirements within and between health facility and the Ministry of Health and Wellness.
8. Public information and outreach to sensitize the public on infection control precautions within the location(s) of the isolation facility through posters, communications via the mass media, and other means using messages designed with WHO messaging advice and tools.

The paragraphs below describe the ESHS risks at each of the stages or phases of the AIF sub-project. The subsequent matrix describes the associated mitigation measures. Additional references and sources of information are provided in Annex 3 of this ESMP.

5.1 Phase 1 - Design and Construction

Aspect	Potential Impacts	Proposed Mitigation
Site selection for construction/assembly area	• There may be anxiety and complaints from those living in or using nearby areas about potential impacts of COVID-19	• Conduct community outreach once site has been finalized. Follow the level of outbreak guidance on Risk Communication and Community engagement (RCCE) readiness and response to the 2019 novel coronavirus (2019-nCoV) published by the WHO.
Hazardous materials handling, storage, use and transportation	• The risk of accidental discharge of hazardous products, leakage of hydrocarbons, oils or grease from construction machinery .	• Avoid the storage of hazardous substances around water bodies • Ensure that storage containers of hazardous substances are always in good condition and tightly closed • Ensure that storage facilities are provided impervious surfaces and bunds to control spill in case of accidental spillage • Develop spill response plan as part of the construction ESMP • Secondary containment for fuels to avoid spill contamination and inspection during operation • Some training in fuel and waste handling should be part of the orientation for workers • Maintain the MSDS for hazardous materials onsite
Construction wastes and debris	•Improper storage and/or disposal of materials • Dispersion of materials in nearby canals, ditches, rivers, streets and adjacent properties	•The contractor shall handle construction materials and waste in accordance with approved procedures. • The contractor should only dispose of materials in areas approved by the Municipality or relevant authority • The contractor shall contain excavated materials in the vicinity of the worksite within berms to prevent dispersion and sedimentation of drains, creeks, streets and adjacent properties • In case of accidental waste dispersion, the environmental authority shall be informed, and restoration measures shall be applied.

Aspect	Potential Impacts	Proposed Mitigation
Dust and noise from construction activity	• Impaired air quality due to emissions from vehicles and dust generated • Respiratory impacts on site workers, nearby residents and pedestrians • Noise generation from the use of machines and construction equipment with its impact on workers and neighbourhoods	• Dust suppression methods such as wetting materials or slowing work should be employed as needed to avoid visible dust • Gas masks / respirators when working in closed areas such as access manholes, etc. (according to approved procedures) • Document requirements and standards in the Contract • Hearing protection for working around machinery where the noise exceeds 85 dB (according to approved procedures) •The location of noisy machinery (including generators) can be positioned away from sensitive sites such as schools' hospitals, residential areas etc • Maintain vehicles and Contractors machinery according to maintenance requirements.
Community Health and Safety	• Movement of heavy trucks and equipment may cause traffic problems and create unsafe situations for local motorists. • Unauthorized entry of local persons may place them in jeopardy if they are on work locations.	• Ensure that a Traffic Management Plan is place where this might be an issue. • Ensure that sites are properly barricaded during construction and temporary pedestrian walkways are provided when required • Restrict hospital staff and public from going to the construction site during and outside working hours by placing posters, reflecting tapes and erecting barriers. • Contractor must develop a Community Health and Safety Plan (CHSP).
Worker health and safety	Accidents to workers on the construction site	• Train workers on prevention of accidents and managing incidents. • Workers must wear protective gear. • Provide first aid kit and emergency plan for accidents or incidents • Proper supervision of the construction workforce.
Worker health and Safety – COVID-19 Risks	Exposure and spread of infection	• For COVID-19 management on the construction site follow the infection control protocol in Annex B of this CERC Addendum.
Water pollution from runoff or infiltration of wastes on different sites where facilities or equipment may be deployed	Clogging of ditches or drains with sediment or silt Fouling of waterways with pollutants of any kind	• Prepare the ground where the facility or equipment will be placed by compacting, lining, coating, and otherwise ensuring it is impervious to water infiltration or percolation. • Sensitize the workers to appropriately manage construction materials and wastes • Use berms, silt traps or silt fences, pits or other measures to ensure that any runoff from the site is controlled

Aspect	Potential Impacts	Proposed Mitigation
Medical Waste Management	Improper handling of medical waste could expose nearby communities or workers to infection	•A Medical Waste Management Plan for handling any items during the site preparation

5.2 Phase 2 – Operations

Aspect	Potential Impacts	Proposed Mitigation
Community Health and Safety	Exposure of visitors	• Control and restrict access to the facility following COVID-19 protocol and guidance from the WHO for health facility, and the COVID-19 risk communication package for healthcare facilities. • Implement the Infection control protocol in the annexes of this CERC-ESMF.
Occupational Health and Safety	Injury to healthcare workers Infection of health care workers	• Train staff on proper use of PPE and ensure there is adequate supply • Regularly monitor performance and conduct maintenance of equipment • Train staff in infection control and SOPs for equipment. • Use the checklist tool from WHO "Risk assessment and management of exposure of health care workers in the context of COVID-19 for any instances where facility staff are exposed to a confirmed COVID-19 person. • Determine how illness among isolation facility staff will be managed in terms of required reporting, self-isolation, and workers compensation. Ensure all facility staff are informed of this process.
Medical Waste Management	Exposure of nearby communities Exposure of workers	• Use procedures from the WHO, CDC, CARPHA, and national plans to properly classify, segregate, label, store, handle, and dispose of wastes • Provide training on waste management and infectious disease management and surveillance programs
Air emissions from incinerator	Air pollution from inadequate incineration of waste	• Ensure the SOPs from the incinerator supplier are followed and that training is received from supplier • Sensitize and train staff to adequately segregate, store, and transport the waste to the incinerator and/or autoclave • Adequately budget for fuel for the incinerator and/or autoclave • Provide appropriate breathing masks to incinerator operators and other staff that work near the incinerator • Regularly monitor and maintain the incinerators to ensure they are working properly in accordance with SOPs

Aspect	Potential Impacts	Proposed Mitigation
Air emissions from isolation unit filtration systems	Spread of airborne particles or aerosols	• Control airflow and provide filtration for intake/exhaust • Manage air filters as medical waste • Regularly monitor and maintain the filtration system to ensure they are working properly in accordance with SOPs
Hazardous liquid waste management	Spread of infection Contamination of streams or groundwater	• Liquid waste to be stored, neutralized, and disposed of so that it is not infectious • Sensitize staff to avoid spillage of waste water on the ground surface and procedures in event of accidental spills • Sensitize staff and users of the facility to appropriately use the wastewater collection and disposal facilities
Non hazardous liquid and solid waste	Unintended mixing of wastes, vector control, waste and debris accumulation	• Segregate liquid and solid wastes where possible • Construct the septic tank and soakaway according to the design specifications • The latrines or septic tank and soakaway sites should be regularly monitored and serviced to prevent problems or overflow • Ensure that wastewater disposal is adequately budgeted for maintenance
Traffic Management and Access Control	Unauthorized entry to facility of vehicles or persons	• Control visitor access and movement into and out of the facility and surrounding areas • Establish dedicated loading and unloading areas for supply vehicles and emergency vehicles.
Community Concerns on COVID -19	Misinformation about the spread of the disease may result in the public not taking the appropriate preventative measures, which may result in the isolation facility being overwhelmed with cases.	• Develop and implement a communication plan for all media types with key messages on prevention for facility visitors, local community, and national level following the tool from the WHO "Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response" • The plan will target the general population as well as specify messages for key vulnerable populations groups such as the elderly and their careers. The plan will take guidance from WHO COVID-19 guidance for preventing and addressing and stigma and WHO COVID-19 risk communication package for healthcare facilities

5.3 Phase 3 – Decommissioning

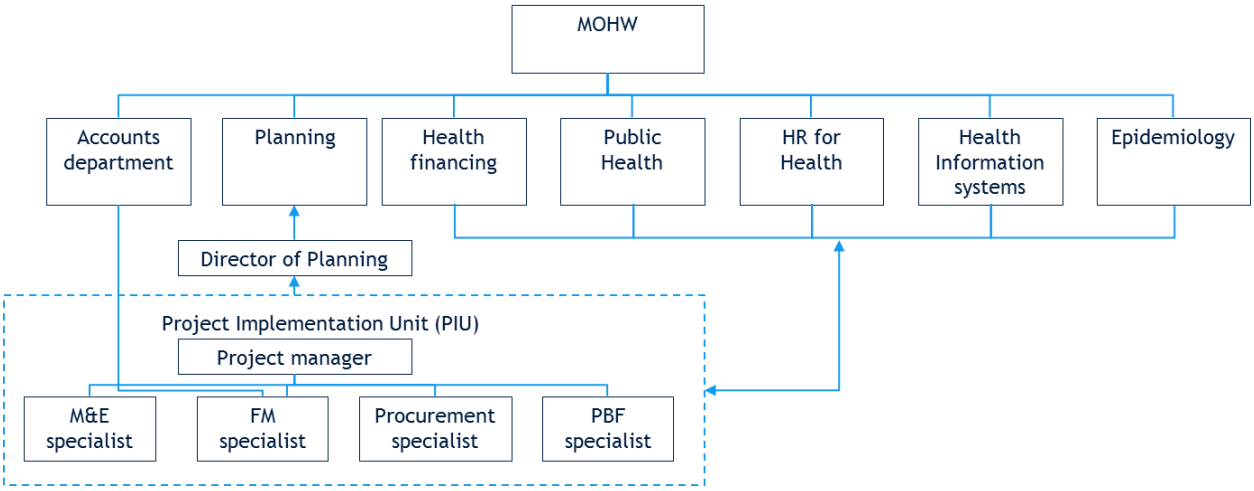
Aspect	Potential Impacts	Proposed Mitigation
Site clean-up	Risk of infection from contaminated runoff, dust, or soil	• Incinerate or bury contaminated solid waste and dispose ash in approved sites • Remove or seal and encapsulate any wastewater system elements

Aspect	Potential Impacts	Proposed Mitigation
Contaminated equipment	Risk of infection from contaminated equipment	• Provide appropriate PPE for staff for cleaning equipment used in all areas used • Clean all equipment used following standards provided by WHO

Chapter 6. Project Management and Institutional Arrangements

6.1 ESMP Implementation Responsibilities

The overall responsibility of ensuring that the mitigation measures under this ESMP are implemented are with the PIU and the Project Coordinator. The figure below provides an overview of the structure that will support and implement the OECSRHP Project as a whole.



The Ministry of Health, Wellness and the Environment will have the overall responsibility for implementation of the project with support and guidance from the Ministry of Finance Central Planning Department. The implementation will be conducted within the existing Health Planning Unit (PIU), Environmental safeguard will be provided by the Chief Environmental Health Officer, while Social safeguard will be managed by the social worker, with support from other technical specialists or consultants as needed. Supervisory safeguard services will be provided by the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology. Additionally, there will also be support in the areas of monitoring and evaluation from other departments within the MOHWE. The supervision by the PIU and contractors doing any construction (for example, site preparation) will be carried out by the Permanent Secretary, MOHWE.

The implementation will be conducted within Public Sector Investment Programme Management Unit (PSIPMU) Ministry of Finance and Economic Planning, Sustainable Development and Information Technology

Facility management

The facility will be managed as an annex of the Milton Cato Memorial Hospital (MCMH) to provide the specialized care of patients with infectious diseases. As such the procedures for

personnel supervision will mimic the arrangements currently operating at the MCMH. The clinical management will be supervised by the department of Internal Medicine, with the Infectious Diseases Specialist (IDS) being the lead. Critical patients will be managed in conjunction with the other members of the Internal Medicine department and the Department of Anaesthesia. All clinical staff will be supervised by the Medical Director and the Senior Nursing Officer. The IDS and the Ward Manger will supervise all clinical staff operating at the facility. The ancillary staff will be supervised by the Hospital Administrator and the Deputy Hospital Administrator. Issues arising on site which cannot be dealt with will be escalated to the relevant supervisory authority at MCMH be it the Medical Director, the Senior Nursing Officer or the Hospital Administrator.

Healthcare staff for the AIF

The medical team composition will vary, there will be three (3) shifts per day with 21 staff members on any one shift at the facility including physicians, nurses, nursing assistants, laundry staff, groundsmen, attendants and cleaners. All nursing and medical will be accommodated at a facility offsite while on one-week rotation; auxiliary staff will remain in staff quarters onsite.

Figure 9: Staffing

Personnel	Role	No. of staff assigned to facility	Shift 1	Shift 2	Shift 3
Doctors		6	2	1	1
Health Grievance Redress Officer	Address and record all complains related to operation of the facility, concerns from patients as well as workers	1			
Nurses		8	3	3	2
Nursing Assistants		9	2	1	1
Laundry Staff		3	1		
Groundsmen		1	1		
Male Attendants		12	2	2	2
Female Attendants		12	2	2	2
Autoclave Attendant		3	1		
Drivers		3	1	1	1
Social workers	To provide counselling and support				

Support staff

In addition to the staff outlined above there will be 4 consultants – 1 infectious disease specialist, 1 internist, 1 anaesthesiologist and 1 intensivist. There will also be 2 social workers on call in addition to 1 psychiatrist and 1 clinical psychologist. Paediatrician will be on call in the event that persons under 18 needs to be hosted at the facility as well as a pharmacy assistant.

6.2 Contractor Responsibilities

The general responsibilities of Contractors were described in the ESMF. Standard environmental and social related clauses were developed and are to be appended to or incorporated into the contracts and shall remain in force throughout the contract period, and are found in the general project ESMF.

- Permits and Approvals
- Site Security
- Discovery of Antiquities (Chance Find Procedure)
- Worker Occupational Health and Safety
- Noise Control
- Use and Management of Hazardous Materials, fuels, solvents and petroleum products
- Use and Management of Pesticides
- Use of Preservatives and Paint Substances
- Site Stabilization and Erosion Control
- Traffic Management
- Management of Standing Water
- Management of Solid Wastes, trash and debris
- Management of Liquid Wastes
- Management of Medical Waste during construction

It is expected that these generic clauses will be incorporated into all contracts, as applicable. In addition, specific project-related recommendations may also be forthcoming from statutory bodies that are part of the permitting agencies such as and these can be added to contract clauses as well.

For purposes of cost estimation and budgeting, the contractors should be aware of the existence of the environmental mitigation measures and associated ESMP requirements and include cost items for such purposes in their proposals.

6.3 Supervision, Monitoring and Reporting

It is the responsibility of the PIU to ensure that the ESMP is being followed by the contractor(s) and site workers.

During the construction phase, environmental and social monitoring was carried out by the PIU as part of developing this ESMP and the accompanying due-diligence (Annex 5).

During operations, reporting will occur, in conformance with the National Biomedical Waste Management Plan and within the context of the OECSRHP.

Chapter 7. Stakeholder Engagement

7.1 Disclosure of ESMP

The ESMP was disclosed on the GoSVG website on August 31, 2020. The website address is as follows: http://www.gov.vc/index.php/oecs-regional-health-project

A printed copy of this ESMP is available at:

Ministry of Finance, Economic Planning, Sustainable Development and Information Technology
First Floor Administrative Building
Bay Street
Kingstown
St. Vincent and the Grenadines

7.2 Community Engagement

Notification
once the AIF is operational, a notification will be place in the newspaper as well on the government website, persons entering or being admitted to the site must first undergo medical screening

Under conditions of a disease outbreak a common approach to stakeholder engagement where large gathering of the public is encouraged will need to change. There are numerous alternatives, but they key criteria for stakeholder engagement remains the same, and that is meaningful dialogue with project affected people with attention given to the most vulnerable. Every alternative must still include what feedback and suggestions were provided by stakeholders. Some suggestions for community engagement during a COVID-19 outbreak are listed below.

- Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings;

- If smaller meetings are permitted, conduct consultations in small-group sessions of no more than 10 people, such as focus group meetings in an outside area which chairs place 6 feet apart;

- If in person meetings are not permitted, make efforts to conduct meetings through online channels, including Webex, Zoom and Skype;

- Try social media and online channels to share activity information. Where possible and appropriate, create dedicated online platforms and chat groups appropriate for the purpose;

- Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, and mail) if a stakeholder does to do not have access to online channels or does not use them frequently;

- Where direct engagement with project affected people or beneficiaries is necessary, identify channels for direct communication with each affected household via a combination of email messages, mail, online platforms, dedicated phone lines with knowledgeable operators, or direct calling by the project team.

Communication and engagement activities under this CERC will also follow the publication from the WHO "Risk communication and community engagement (RCCE) readiness and response to the 2019 novel coronavirus (2019-nCoV)" which will guide messaging about the COVID -19 preparedness and response measures under the CERC and gives broader guidance and checklists for national level communication during different phases of a disease outbreak.

7.3 Grievance Redress Mechanism

The Grievance Mechanism for the Isolation Facility will follow the GRM for the OECS Regional Health Project and is summarized below.

Process:

1. Signage on the GRM will be placed at the entrance/exit of the facility, on each floor of the facility, in the dining area, and on the living quarters).

2. Grievances will be received in writing, telephone or email; All grievance in writing can be addressed to Health Project Grievance Officer;

3. All grievance shall be registered in the grievance log. Contact with the aggrieved must be within 10 days (please see GRM for OECSRHP for further detail).

Sample Notification to the Public on how to submit grievance

All grievances relating to the development of this project are to be directed to:

Roselle Solomon
Health Project Grievance Officer
OECS Regional Health Project – Isolation Facility
Ministry of Health, Wellness and the Environment
First Floor Ministerial Building, Kingstown
Telephone: 784 534 4325
Email – mohesvg@gmail.com

This sample notification can be place at strategic points at the facility.

References and sources of further information

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance
https://www.cdc.gov/coronavirus/2019-ncov/lab/lab-biosafety-guidelines.html
https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html
https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance#guidance-for-health-professionals
https://worldbankgroup.sharepoint.com/sites/wbsites/coronavirus/Pages/index.aspx

Annex 1. Screening Tool for E&S Risks

The form below identifies potential impacts of the proposed activities envisioned under CERC actions. Many of the actions or activities have low or negligible potential negative impacts, such as purchase of equipment or supplies. Some may have impacts that are typical for small construction or rehabilitation projects, such as repair of damaged infrastructure, buildings, or clinics. Others, particularly those dealing with management of infectious disease control such as COVID-19, may have moderate to high risk. The form below shows that the Argyle Isolation Facility (shaded box) has moderate to substantial risk, and therefore this ESMP was prepared.

	Argyle Isolation Facility	Subproject Name	
	International Airport, Saint Vincent and the Grenadines	Subproject Location	
	Ministry of Health, Wellness and the Environment	Subproject Proponent	
	$610,000.00	Estimated Investment	
		Start/Completion Date	
	Subprojects / Activities	Potential E&S Risks or Impacts	E&S Risk Level
1	Purchase of medical equipment and supplies	None	Low
2	Repair of damaged infrastructure including, but not limited to: water supply and sanitation systems, dams, reservoirs, canals, roads, bridges and transportation systems, energy and power supply, telecommunication, and other infrastructure damaged by the event;	Increased dust, noise, water pollution, solid/hazardous/ Toxic wastes, waste oil/fuels, public health and safety; possible use of asbestos-contaminated as construction materials and land acquisition; and impacts on ethnic and vulnerable groups.	Moderate
3	Re-establish of the urban and rural solid waste system, water supply and sanitation (including urban drainage);	Same as (2) above	Moderate
4	Repair of damaged public buildings, including schools, hospitals and administrative buildings;	Same as (2) above	Moderate
5	Repair, restoration, rehabilitation, retro-fit, schools, clinics, or hospitals;	Same as (2) above	Moderate

	Argyle Isolation Facility	Subproject Name	
6	**Establishing emergency isolation and quarantine facilities and locations for mobile facilities.**	**Highly variable depending on locations chosen, risks associated with community concern, information sharing, and occupational health and safety.**	**Moderate to substantial**
7	Removal and disposal of debris associated with any eligible activity	Waste management and disposal	Moderate to substantial
8	Disposal of medical wastes (at camp site, small clinic/hospitals), asbestos-based materials, other toxic/hazardous wastes	Increase health risks, need management of medical waste, toxic materials, asbestos-contaminated debris	Moderate to substantial
9	Temporary toilets for emergency facilities	Hygiene, waste management	Moderate to substantial

Activities and actions with low potential E&S risk require no further safeguards actions. Those with moderate potential risk will be managed using the general ESMF for the OECS Regional Health System Strengthening project, and will typically require that an ESMP be developed. Those with moderate to substantial potential risk will be managed using the tools in the general ESMF for the OECS Regional Health Project along with the additional safety guidance and information provided in this CERC-ESMF, and will also require than an ESMP be developed. This ESMP was therefore developed for the Argyle Isolation Facility Unit (AIF).

Annex 2. Infection and Prevention Control Protocol (IPCP)

The following information was adapted from the CDC Interim Infection Prevention and Control Recommendations for patients with confirmed COVID-19 or persons under investigation for COVID-19 in Healthcare Settings. The original reference should be consulted for any updates.

HEALTH CARE SETTINGS

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

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

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

4. **Manage Visitor Access and Movement**
   - Establish procedures for managing, monitoring, and training visitors
   - All visitors must follow respiratory hygiene precautions while in the common areas of the facility, otherwise they should be removed

- Restrict visitors from entering rooms of known or suspected cases of COVID-19 patients. Alternative communications should be encouraged, for example by use of mobile phones. Exceptions only for end-of-life situation and children requiring emotional care. At these times, PPE should be used by visitors.
- All visitors should be scheduled and controlled, and once inside the facility, instructed to limit their movement.
- Visitors should be asked to watch out for symptoms and report signs of acute illness for at least 14 days.

CONSTRUCTION SETTINGS IN AREAS OF CONFIRMED CASES OF COVID-19

1. Minimize Chance of Exposure

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

2. Training of Staff and Precautions

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

3. Managing Access and Spread

- Should a case of COVID-19 be confirmed in a worker on the project site, visitors should be restricted from the site and worker groups should be isolated from each other as much as possible.
- Extensive cleaning procedures with high-alcohol content cleaners should be undertaken in the area of the site where the worker was present, prior to any further work being undertaken in that area.

Annex 3. Health and Safety Guidelines for Retrofitting/Rehabilitation of Medical Facilities

The following table lists the health and safety risks and impacts associated with small civil works financed by the Bank for retrofitting and rehabilitation of medical facilities (including isolation units and respiratory facilities) in response to the COVID-19 outbreak. Potential mitigation measures and references to sources of additional advice and information are provided as guidelines for the PIU to use in preparing the appropriate environmental instrument such as the Environmental and Social Management Plan (ESMP).

Table 1: Health, Safety Risks and Impacts associated with design, construction civil works, operation, and decommissioning

Activity	**Risks and Impacts**	**Mitigation Measures**
Design activity – hospitals, clinics	The focus on treatment and care is progressed disproportionately with the need for adequate medical waste infrastructure.	Ensure that the designs for medical facilities also consider the collection, segregation and treatment of medical waste. The treatment of healthcare wastes produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated and then safely disposed. Open burning and incineration of medical wastes can result in emission of dioxins, furans and particulate matter, and result in unacceptable cancer risks under medium (two hours per week) or higher usage. If small-scale incinerators are the only option available, the best practices possible should be used, to minimize operational impacts on the environment. Best practices in this context are: ✓ effective waste reduction and segregation, ensuring only the smallest quantities of combustible waste types are incinerated; ✓ an engineered design with sufficient residence time and temperatures to minimize products of incomplete combustion; ✓ siting incinerators away from health-care buildings and residential areas or where food is grown; ✓ construction using detailed engineering plans and materials to minimize flaws that may lead to incomplete destruction of waste and premature failures of the incinerator;

Activity	Risks and Impacts	Mitigation Measures
		✓ a clearly described method of operation to achieve the desired combustion conditions and emissions; for example, appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature before waste is burned, use of appropriate loading/charging rates (both fuel and waste) to maintain appropriate temperatures, proper disposal of ash and equipment to safeguard workers; ✓ periodic maintenance to replace or repair defective components (including inspection, spare parts inventory and daily record keeping); and ✓ improved training and management, possibly promoted by certification and inspection programs for operators, the availability of an operating and maintenance manual, visible management oversight, and regular maintenance schedules. Single-chamber, drum and brick incinerators do not meet the BAT requirements under Stockholm Convention. Small-scale incineration should be viewed as a transitional means of disposal for health-care waste. Alternative treatments should be designed into longer term projects, such as steam treatment methods. Steam treatment should preferably be on site, although once treated, sterile/non-infectious waste may be shredded and disposed of in suitable waste facilities. See WHO Safe management of wastes from health-care activities
Construction activity – hospitals, clinics, mortuary	Land taking for the construction of new and expansion of existing hospitals. Injury during the construction of new buildings or refurbishment of existing buildings.	Follow OP4.12 and IPF Policy para 12 on E&S requirements in situations of urgent need of assistance. The property was an uninhabited dwelling house. It was acquired (do we have the deed of ownership) do we have anything with negotiation or offers sent to the owner) (can we have something from the chief surveyor

Activity	Risks and Impacts	Mitigation Measures
Selection of site	Land acquisition	Site location is not within a residential area, nearest north east may be more than 1000 metres, and approximately 500 metres west. 200 metres from the fire house of the Argyle International Airport.
Dust and Noise from construction activity	Air quality and noise generation	The facility is not in an active roadway, noise and dust will be suppressed and workers used masks/respirators.
Design and operation of facilities, including triage, isolation(or quarantine) facilities	The design of the facility and the operating procedures will help prevent spread of infection Cross contamination	For patients with possible or confirmed COVID-19, isolation rooms should be provided and used at medical facilities. Isolation wards should: ✓ ideally be under negative pressure (neutral pressure may be used, but positive pressure rooms should be avoided); ✓ be sited away from busy areas (areas used by many people) or close to vulnerable or high-risk patients, to minimize chances of infection spread; ✓ have dedicated equipment (for example blood pressure machine, peak flow meter and stethoscope), but should avoid excess equipment or soft furnishings; ✓ have signs on doors to control entry to the room, with the door kept closed; ✓ have an ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment. An operation manual should be prepared prior to the opening of isolation rooms to describe the working procedures to be taken by healthcare workers to protect themselves and prevent infection escape while providing treatment. The operational procedures should be of a standard to meet guidance from WHO and/or CDC on infection control: ➢ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected; ➢ WHO technical brief water, sanitation, hygiene and waste management for COVID-19; ➢ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources); ➢ WHO interim practical manual for improving infection prevention and control at the health facility;

Activity	Risks and Impacts	Mitigation Measures
		➢ CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings; and ➢ CDC guidelines for environmental infection control in healthcare facilities.
Improve access to support and treatment for disadvantaged vulnerable groups	Some vulnerable groups (especially the elderly or those with pre-existing medical conditions) may be severely affected by COVID-19 and may need additional support to access treatment.	Projects should develop and commit to specific actions to ensure disadvantaged and vulnerable groups have effective treatment, whether in medical facilities or in the community.
Employment of workers	Workers exposure to COVID 19	Workers must wear personal protective equipment (PPE) once inside the unit
Transient and expat workforce	Workers that are mobilized from abroad or returning from abroad become vectors for transmission of disease to construction projects. Workers that travel from other regions	Expats or transient workers should adhere to national requirements and guidelines with respect to COVID-19. Expats or transient workers coming from countries/regions with cases of the virus: • Should not return if displaying symptoms • Should self-isolate for 14 days following their return For self-isolation, workers should be provided with a single room that is well-ventilated (i.e., with open windows and an open door). If a single room is not available for each worker, adequate space should be provided to maintain a distance of at least 1 m between workers sharing a room. Workers in isolation should limit their movements in shared space, for

Activity	Risks and Impacts	Mitigation Measures
	may also provide a vector for passing infection onto work sites.	example through timed use of shared spaces (such as kitchens and bathrooms) with cleaning prior to and after use of the facilities. Healthcare professionals and cleaners should visit each day (wearing the appropriate PPE and observing hygiene requirements and make appropriate arrangements for supplying food and water to the kitchens for the workers in isolation. Further information is provided by WHO in Home care for patients with suspected novel coronavirus (COVID-19).
Visitors to Isolation centre	Contamination to the entire population	Visitors should not be allowed until the patients has shown no signs and symptoms for 14 days, and the number of staff involved in caring for those in isolation should be kept to a minimum. An ambulance can be provided to take patients home when they are discharged
Labour camps	Close working and living conditions of workforce may create conditions for the easy transmission of COVID-19 and the infection of large numbers of people.	Develop contingency plans with arrangements for accommodation, care and treatment for: • Workers self-isolating • Workers displaying symptoms • Getting adequate supplies of water, food and supplies Contingency plans also should consider arrangements for the storage and disposal arrangements for medical waste, which may increase in volume and which can remain infectious for several days (depending upon the material). Ensure medical facilities are stocked with adequate supplies of medical PPE, as a minimum: ✓ Gowns, aprons ✓ Medical masks and some respirators (N95 or FFP2) ✓ Gloves (medical, and heavy duty for cleaners) ✓ Eye protection (goggles or face screens) ✓ Medical staff at the facilities should be trained and be kept up to date on WHO advice and recommendations on the specifics of COVID19. The medical staff/management should run awareness campaigns and posters on site advising workers:

Activity	Risks and Impacts	Mitigation Measures
		• how to avoid disease spread (cough/sneeze in crook of elbow; keep 1m or more away, sneeze/cough in tissue and immediately through tissue away, avoid spitting, observe good hygiene) • the need to regularly wash hands with soap and water – many times per day • to self-isolate if they think they may have come in contact with the virus to self-isolate if they start to display any symptoms, but alert and seek medical advice
Sanitation at centres	Cross contamination	Wash stations should be provided regularly throughout site, with a supply of clean water, liquid soap and paper towels (for hand drying), with a waste bin (for used paper towels) that is regularly emptied. Wash stations should be provided wherever there is a toilet, canteen/food and drinking water, or sleeping accommodation, at waste stations, at stores and at communal facilities. Where wash stations cannot be provided (for example at remote locations), alcohol-based hand rub should be provided. Enhanced cleaning arrangements should be put in place, to include regular and deep cleaning using disinfectant of catering facilities/canteens/food/drink facilities, latrines/toilets/showers, communal areas, including door handles, floors and all surfaces that are touched regularly (ensure cleaning staff have adequate PPE when cleaning consultation rooms and facilities used to treat infected patients) Worker accommodation that meets or exceeds IFC/EBRD worker accommodation requirements (e.g. in terms of floor type, proximity/no of workers, no 'hot bedding', drinking water, washing, bathroom facilities etc.) will be in good state for keeping clean and hygienic, and for cleaning to minimize spread of infection. To minimize pressure on PPE resources: WHO advice on the effectiveness and use of PPE by general public should be followed to ensure that the supplies are not exhausted through ineffective use – this is equally important on construction sites. Other measures (such as working water sprinkling systems at crushers and stock piles, covered wagons, water suppression or surfacing of haul roads etc.) should be used for dust

Activity	Risks and Impacts	Mitigation Measures
		suppression on site before relying upon the use of dust masks (which could unnecessarily reduce the availability of N95/FFP2 masks for use by medical staff performing some duties)
Medical Waste Management	Medical waste exposure to communities	A Medical Waste Management Plan for handling and disposal of waste will be designed.

Annex 4. Equipment for the Argyle Quarantine Unit

Advanced Supply Caribbean
PO Box 4102
Seminole FL 33775
Ph: 727-612-6272

Name		Advanced Supply Caribbean
C/O		Chase Bank
Address		4315 Duhme RD
Address		Maderia Beach FL 33708
Swift Code:		CHASUS33XXX
Routing Code:		21000021
ACCT #		901001722
Payment Terms:		TBD
Estimated Delivery:		See ETA Document

CORPORATE SEAL ASC DUNS # 10-595-5142 & BBB RATING A++ OFFICIAL
ADVANCED SUPPLY CARIBBEAN
FLORIDA

Invoice # 901225 A

DATE: 03/12/2020

BILL TO:
Milton Cato Hospital

St Vincent W.I.
1-784-456-1185

SHIP TO:
Milton Cato Hospital

Amerijet #

REQUISITIONER			SHIP VIA	F.O.B
QUANTITY	**Item #**	**DESCRIPTION**	**UNIT PRICE**	**TOTAL**
10	Item # 1	Patient Beds 36"x80" Fully Electric	$890.45	$8,904.50
10	Item # 2	Patients mattress 36"80"x3" Foam with Spring	$179.55	$1,795.50
4	Item # 3	Aluminum Folding Stretchers 80" 350lb weight limit	$424.65	$1,698.60
1	Item # 4	1000 Gal Water Tank FDA approved	$1,987.59	$1,987.59
1	Item # 5	Milnor 60lb Washer	$19,752.38	$19,752.38
1	Item # 6	Milnor 60lb Dryer	$19,357.15	$19,357.15
12	Item # 7	I.V Stands with wheels	$424.65	$5,095.80
10	Item # 8	Mindray Accutorr 7	$2,190.00	$21,900.00
15	Item # 9	Covidien Nellcor Pulse Oximeter	$2,190.00	$32,850.00
10	Item # 10	Laryngoscope 9 piece set	$94.90	$949.00
20	Item # 11	Thermometers	$29.00	$580.00
10	Item # 12	Diagnostic Kit	$320.65	$3,206.50
30	Item # 13	Thermometers	$320.65	$9,619.50
15	Item # 14	Sphygmomanameters	$41.65	$624.75
10	Item # 15	Portable Oxygen System	$249.10	$2,491.00
6	Item # 16	Amaircare 1 Hepa Ventilator with Filters	$15,850.90	$95,105.40
10	Item # 17	6' White Folding Table	$151.25	$1,512.50
12	Item # 18	Folding Chair	$61.02	$732.24
50	Item # 19	Bed Pans	$2.99	$149.50
100	Item # 20	Wash Basin	$2.36	$236.00
100	Item # 21	Emesis Basin	$2.39	$239.00
			SUBTOTAL	$228,786.91
		Domestic and Ocean Freight Included	**SHIPPING & HANDLING**	$27,454.40
			TOTAL DUE	$256,241.31

Annex 5. Due-Diligence for Retroactive Reimbursement

I. PURPOSE

This Annex represents a Due-Diligence exercise for the Environmental, Social, Health and Safety (ESHS) measures described in this ESMP for the work performed to date on the design and construction of the Argyle Isolation Facility (AIF).

This Due-Diligence is based on a review of the available information related to the AIF, and a site visit by the Safeguards Specialist(s) assigned to the project by the Government of Saint Vincent and the Grenadines (GoSVG). It provides assurances that the project has been designed and constructed in conformance that the appropriate safeguards mitigation measures have been done as detailed in the ESMP. It also identifies any exceptions and provides a time frame to correct them as necessary.

II. COMPLIANCE CHECKLIST

The checklist below references the major safeguards elements for screening, design, supervision, and construction elements covered in the ESMP. (The elements for operations and decommissioning are also described in the ESMP but will be verified in future once the facility is operational.)

For each of the major ESHS elements within the ESMP related to design and construction, the checklist below provides a response (Yes / No) to each query and summarizes the compliance status of each, using the following assessment scheme:

- Highly Satisfactory (HS) – the sub-project is in full compliance with requirement(s).
- Satisfactory (S) – the sub-project complied with the most relevant aspects of the requirements(s).
- Partly Satisfactory (PS) – the sub-project did not comply with certain requirement(s), and to address the gap(s) or pending item(s) an Action Plan has been proposed.
- Unsatisfactory (U) – the project did not comply with the requirement(s).

The checklist below also states which aspects or issues are pending or which have resulted in impacts or risks that have not been addressed or resolved, and are included in the Action Plan in section III.

Table 1. Compliance Checklist

ESHS Element	Due-Diligence Aspect / Issue	Compliance Status	Variance / Explanation
SCREENING	Was the sub-project screened using the ESMF screening tools?	No / Partly Satisfactory	The screening was done after site selection and is included in Annex 1 of the ESMP.
BUDGET	Was an ESMP prepared that included a budget?	No / Satisfactory	The ESMP did not require additional expenditures. The budget for operations is included in the ESMP.
DESIGN	Is the facility design as described in this ESMP?	Yes / Satisfactory	None
CONTRACT	Did the contractor receive ESHS requirements?	No / Partly Satisfactory	The contractor was aware of general ESHS requirements but did not receive written guidelines or requirements
NATIONAL LAWS	Was the facility constructed in accordance with national laws and applicable regulations?	Yes / Satisfactory	None
MITIGATION MEASURES	Were the mitigation measures described in the ESMP adhered to?	Yes / Satisfactory	The ESMP describes the general mitigation actions that were done
	Were any accidents or incidents reported? If so, were they followed up?	No / Satisfactory	None
	Were precautions taken to avoid infectious disease (e.g. COVID-19) by the contractor and work teams?	Yes / Satisfactory	None
	Has the site been cleaned up and restored, all wastes removed, and ready for operation?	No / Partly Satisfactory	The final stages of the project are underway and will include clean-up
	Were any biomedical wastes encountered and if so were they managed appropriately as described in the ESMP?	No / Satisfactory	None

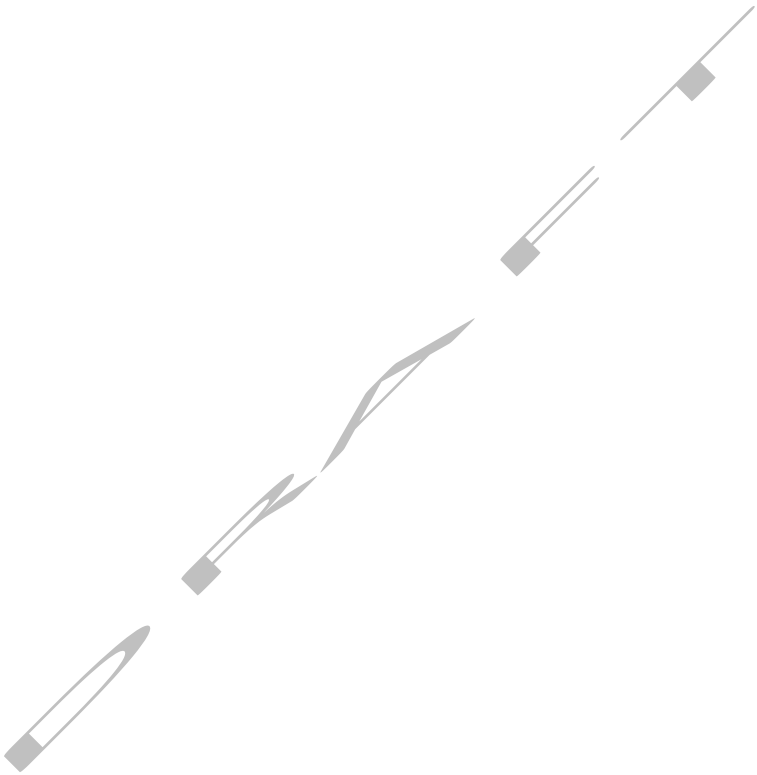
ESHS Element	Due-Diligence Aspect / Issue	Compliance Status	Variance / Explanation
SUPERVISION	Was there a Supervisor charged with ESHS on the site?	Yes / Satisfactory	A clerk-of-works was on site.
	Were supervision reports prepared and were they available for review?	No / Partly Satisfactory	No reports are available but a discussion with the clerk-of-works did not reveal any issues during construction.
PUBLIC INFORMATION	Was the ESMP disclosed on the GoSVG website?	No / Partly Satisfactory	Publication will be done once ESMP is in final form
GRIEVANCE REDRESS	Is the GRM operational for the project and works?	Yes / Satisfactory	None
	Were any complaints received about the project?	No / Satisfactory	None

III. ACTION PLAN

The inspection and due-diligence process has noted that the following items remain to be accomplished, and the timetable to complete them is in Table 4 below:

Table 2. Action Plan

Variance / Explanation	Action Item	Schedule
Site clean-up is pending	Finish clean-up once final works are completed	July 30th, 2020
Publish ESMP	Finalize ESMP and publish on website	June 15th, 2020
Doors, CCTV, enclosure of nurses' station	Complete works	July 31st, 2020



IV. SIGNATURES

The inspection and due-diligence was conducted by and approved by the following individuals:

Reviewed and confirmed by:

Date: 13 July 2020

Mr. Cuthbert Knights
Permanent Secretary

Approved by:

Date: 15·07·2020

Mr. Recardo Frederick
Director of Economic Planning

V. PHOTOGRAPHS AND OTHER DOCUMENTARY EVIDENCE

Site photographs, inspection records, and/or other relevant information are provided in this ESMP. These demonstrate compliance with the key aspects of the ESMP for siting and design. Construction of the facility is complete.

View of ground floor from front

View of sealed septic /sewer system

Annex 6. Lease-to-own Agreement

NO: 844/2020

SAINT VINCENT AND THE GRENADINES

THIS LEASE TO OWN is made the 6th day of March in the Year of Our Lord Two Thousand and Twenty between **MRS. HARRIET DEANE** of Argyle in the Parish of Charlotte in the State of Saint Vincent and the Grenadines (hereinafter referred to as "the ***Lessor***") which expression shall where the context so admits include her heirs and assigns successors, executors, and administrators) of the **ONE PART** and **THE GOVERNMENT OF SAINT VINCENT AND THE GRENADINES** acting herein by **CUTHBERT KNIGHTS** Permanent Secretary in the Ministry of Health, Wellness and the Environment (hereinafter referred to as "the ***Lessee***" which expression shall where the context so admits include its successors and assigns) of the **OTHER PART**.

WHEREAS the Lessor is seized absolute in possession free from all encumbrances the hereditaments situated at Argyle in the Parish of Charlotte in the State of Saint Vincent and the Grenadines more particularly set out in the Schedule hereto and described and delineated in Survey Plan G23/105 (hereinafter referred to as "the demised premises").

AND WHEREAS the Lessor has agreed to lease the demised premises to the Lessee for a term and thereafter the Lessor agrees to sell and the Lessee agrees to purchase the demised premises at the end of the term on the terms and subject to the conditions hereinafter set out.

MINISTRY O FINANCE
RECEIVED
MAR 25 2020
ST. VINCENT AND
THE GR...

THIS AGREEMENT NOW WITNESSETH as follows:-

1. In consideration of the rent and the Lessee's covenants hereinafter reserved the Lessor hereby **LEASES UNTO** the Lessee **ALL AND SINGULAR** the exclusive use of the demised premises **TO HOLD** the same **UNTO AND TO THE USE** of the Lessee for a period of one (1) year commencing on the 13th day of March 2020 **PAYING THEREFOR** the total amount of **NINETY-SIX THOUSAND DOLLARS ($96,000.00)** payable monthly in advance at the rate of **EIGHT THOUSAND DOLLARS ($8,000.00).**

2. **THE LESSEE HEREBY COVENANTS** with the Lessor as follows:

(a) To pay the rent herein reserved on the day and in the manner aforesaid to the Lessor at such address as the Lessor may from time to time in writing specify;

(b) To pay all charges and bills in connection with the provision of water telephone and electricity consumed by the Lessee from the date of the commencement of this lease;

(c) At its own cost and expense to manage tend and maintain the entrance driveways and parking areas forming part of the demised premises in a good tenant like manner;

(d) To effect at no cost to the Lessor the internal changes and adjustments which are necessary to enable the Lessee to comfortably and satisfactorily occupy the demised premises;

(e) To make good and pay for any damage to the demised premises which occurred as a result of the negligence of the Lessee fair wear and tear excepted;

(f) Not to assign sublet or otherwise part with possession of the demised premises or any part thereof without the prior consent of Lessor in writing;

(g) To permit the Lessor his servants or agents with or without workmen or others at all reasonable times to enter upon the demised premises

or any part thereof to examine the state and condition thereof or for performing any necessary repairs thereto provided that such entry shall not be made before the expiration of forty-eight (48) hours' notice thereof to the Lessee;

(h) Not to use or knowingly permit the demised premises or any part thereof to be used for any illegal purpose;

(i) Not to use or bring upon the demised premises any articles of a specially combustible inflammable or dangerous nature and not to do or knowingly permit or suffer to be done anything by reason whereof any insurance effected on the demised premises may be rendered void or voidable or whereby the rate of premium thereon may be increased;

(j) Not to do or knowingly permit the doing of any act or thing upon the demised premises which constitutes a nuisance to the occupiers or owners of any adjoining premises or on any premises in the vicinity or to the public generally;

(k) Upon receipt of any notice order direction or other thing from a competent authority affecting or likely to affect the demised premises whether the same shall be served directly upon the Lessee or the original or a copy thereof be received from any occupant of the demised premises or other person by the Lessee the Lessee shall forthwith deliver the same to the Lessor;

(l) To yield up the demised premises unto the Lessor at the expiration or earlier determination of this Lease in the same condition in which it was leased to the Lessee from the Lessor save in the circumstances of normal wear and tear.

3. **THE LESSOR COVENANTS** with the Lessee as follows:

(a) That the Lessor will remain seized absolute in possession free from encumbrances the demised premises for the term of the lease;

(b) That the Lessee paying the rent herein reserved and performing and observing the covenants and conditions hereinbefore contained and on the part of the Lessee to be performed and observed the Lessee shall peaceably hold and enjoy the demised premises during the term hereby granted without any interruption or disturbance from the Lessor or any person rightfully claiming under or in trust for it;

(c) To maintain repair and otherwise keep in good tenantable repair and condition the structure, exterior, ceiling, external walls, plumbing, stairs and stairwells of the demised premises;

(d) To leave unencumbered and free at all times the entrance driveways and parking areas forming part of the demised premises for the use of the Lessee;

(e) To insure the demised premises against any loss or damage occasioned by the incidence of fire and or any act of God with a reputable insurance company and keep such policy in full force and effect during the currency of this lease;

(f) To pay all existing and future property taxes charges and assessments payable in respect of the demised premises save and except as provided in Clause 2(b) herein;

4. **IT IS MUTUALLY AGREED** as follows:-

(a) If the rent reserved or any part thereof shall at any time be in arrears or remain unpaid for sixty (60) days after the same shall has become due (whether legally demanded or not) or if the Lessee shall at any time fail or neglect to perform and observe any of the covenants and conditions herein contained and on the part of the Lessee to be performed and observed then and in such case the Lessor may re-enter upon the demised premises in the name of the whole and thereafter hold and enjoy the same as if this lease had not been granted but without prejudice to any right of action or remedy for any antecedents breach of covenant by the Lessee;

(b) Notwithstanding the provision of clause 4(a) herein in the event that the demised premises at any time during the term hereby granted be damaged or destroyed so as to be unfit for human habitation and use then the rent hereby reserved or a fair proportion there of shall considering the extent and nature of the damage sustained be suspended until the demised premises shall be rendered fit for habitation;

(c) If the Lessee shall be desirous of renewing this lease for a further term then six (6) months prior to the expiration of the current term the Lessee shall give the Lessor notice in writing of such desire and provided that the Lessee has complied with the covenants and stipulation herein contained the Lessor shall let the demised premises to the Lessee for such further term on terms and conditions to be mutually agreed at an increased monthly rent amounting to six percent (6%) of the current rate;

(d) (i) The Lessor agrees to sell and the Lessee agrees to purchase the demised premises at the end of the term - that being the term referred to in clause 1 or any renewed term in accordance with clause 4(c) herein – for a purchase price of XCD$999,965.00 less the amount already paid by the Lessee as rent during the term.

(ii) For the avoidance of doubt, the sum payable by the Lessee as the purchase price of the demised premises at the end of the term shall be XCD$999,965.00 minus $96,000.00, if the purchase takes place at the end of the term referred to in clause 1; and the sum payable by the Lessee as the purchase price of the demised premises at the end of the term shall be XCD$999,965.00 minus $48,000.00, if the purchase takes place at the end of the renewed term referred to in clause 4(c).

(e) Any notice to be served on either party under the provisions of this lease shall be in writing and shall be deemed sufficiently and properly served;

(i) Upon the Lessee if left at or sent to the Ministry of Health and the Environment, Kingstown Saint Vincent and the Grenadines.

(ii) Upon the Lessor if addressed and sent to **MRS. HARRIET DEANE** of Argyle in the Parish of Charlotte in the State of Saint Vincent and the Grenadines

Provided that all notices sent by post shall be sent by registered post.

THIS IS THE SCHEDULE REFERRED TO HEREIN

ALL THAT piece or parcel of land situated in Argyle in the parish of Charlotte in the State of Saint Vincent and the Grenadines being in extent 29,811 square feet bounded to the North by the Windward Highway to the East by lands delineated by survey plan no. G8/09 and to the South and West by the remaining lands of Jannis Deane as is more particularly described and delineated on Survey Plan G23/105 approved and lodged at the Lands and Surveys Department on 26th day of April 1996.

IN WITNESS WHEREOF the parties hereto have set their respective hands and affixed their seals the day and year hereinbefore written.

SIGNED AND SEALED by the within-Named **LESSEE**) *Harriet L. Deane*
)**HARRIET DEANE**

In the presence of:

SIGNED AND SEALED On behalf of the **LESSEE**)
)**CUTHBERT KNIGHTS**

In the presence of:

CG4070420M4650 - 13/3/2020 - 13/4/2020 .B8000

SAINT VINCENT AND THE GRENADINES

Dated the day of 2020

BETWEEN

HARRIET DEANE

AND

THE GOVERNMENT OF SAINT VINCENT AND THE GRENADINES

L E A S E TO OWN

PREPARED BY:
MINISTRY OF LEGAL AFFAIRS

Annex 7. SOP for negative air pressure system

NEGATIVE PRESSURE VENTILATION FANS WITH AIR SCRUBBING CAPABILITY

MINISTRY OF HEALTH ISOLATION FACILITY – ARGYLE

STANDARD OPERATING PROCEDURE

Table of Contents

1.0 Purpose of this SOP (Standard Operating Procedure)

This SOP is meant to describe the processes for regular operation, regular inspection, and cleaning & maintenance of the negative pressure ventilation fans and their filtration systems installed at the isolation facility at Argyle.

Following the procedures herein is recommended for both the safety of the personnel, as well as the protection of the equipment.

2.0 Scope

This SOP is to be read and understood by all personnel who will be operating and maintaining the equipment. While at the time of writing we do not know what personnel this will be, they may be identified and made aware of their roles at a later date.

3.0 Prerequisites

This section of the SOP lists any prerequisites required for performing different tasks regarding the equipment. The specific personnel to perform these tasks are to be assigned by the management of the facility.

3.1 Operator

There are no prerequisites for the person operating the equipment.

3.2 Inspector

The inspector should be able to safely climb a ladder to get to the equipment. There are no other prerequisites for the inspector.

3.3 Maintenance Personnel

Maintenance personnel are required to wear the required PPE (personal protective equipment) stated in section 4.0 of this document before performing the maintenance procedures. The maintenance personnel should also have a basic level of mechanical equipment maintenance.

4.0 PPE Requirements

Minimum PPE required by maintenance personal is as follows:

Disposable gloves, eye protection (goggles), face mask/respirator (meeting or exceeding N95 or KN95 specifications), covering of normal clothing which is to be removed and washed immediately on task competition or disposable covering/overalls, closed toe shoes.

The PPE requirements stated above may need to be revised depending on the patient occupants of the facility and should be advised by the medical management staff at the facility prior to commencement of maintenance procedure.

5.0 Responsibilities

At the time this document was prepared, we were not informed of specific personnel who will be responsible for the various tasks. As such, these personnel members are to be listed on the annex page at the end of this document.

6.0 Procedures

This section details the operations for the three procedures this document covers, operation, inspection, and maintenance.

6.1 Operation

Each of the units in the facility is switched by a wall mounted switch with an indicator light. There are two modes to these units, on and off.

When in the off position the indicator light on the wall mounted switch will be off. To start the unit simple turn the switch to the on position, the indicator light will illuminate indicating that the equipment is turned on.

These units need to be run only if there are patients in the various zones of the facility requiring that that area be isolated. If not required, the units should be switched off to reduce wear on all components and extend the working life of the HEPA filter and UV-C lights in the units.

6.2 Inspection

The units should be inspected monthly.

Before inspecting the equipment, ensure that the equipment is turned on and the indicator light on the operator switches are illuminated.

The inspection is then to remove the metal hood from the top of the unit(s) being inspected. This hood has support screws on the sides and is magnetically adhered to the top of the unit. Once all the screws in the side of the covering hood are removed, hold the handle on top of the cover and pull straight up with a jerking motion to release the magnet.

Once removed check the filter change light to see if it is illuminated. If the light is off the filter is still in good working condition. If the light is illuminated the filter needs to be changed, and maintenance needs to be scheduled to do so.

Check the UV-C light indicator to confirm that the light is functioning properly. This can be confirmed by a blue glow being emitted from the perimeter inspection plug. If the light does not appear to be functioning maintenance needs to be scheduled to check the light driver or replace the bulb. Replace the inspection plug after the light inspection is completed.

Place a hand at the air discharge of unit to confirm that air is moving and being ejected by the unit. If no air is felt being ejected by the unit maintenance should be scheduled to check the operation of the unit.

Once all the above inspections are completed and recorded replace magnetic external cover of the unit and replace the support screws which were removed.

Once complete, return the unit to the state (on/off) required by the operator.

6.3 Maintenance

Maintenance should be carried out on the unit every 3 months of operation. Before maintaining the units ensure that the equipment is turned on and the indicator light on the operator switches are illuminated.

Carry out a preliminary inspection with the unit operating, follow the procedure for inspection in section 6.2 of this document. Once this inspection is complete do not replace the cover of the unit.

Use the control switches on the unit body to shut the unit down, and to also turn off the UV-C light. This must be done before proceeding further with the maintenance procedure.

At this point there are multiple maintenance procedures which may or may not be required. Below are these procedures and when they are to be performed.

6.3.1 UV-C Bulb Replacement

The UV-C bulb should be replaced after 2 years of being installed. Even though the bulb may be illuminating, it is no longer performing its task as designed or required at this age. The bulb should also be replaced if it is blown and is not illuminating.

Unscrew the bulb retention plate on the duct. Gently slide the bulb and bulb holder out of the duct. Remove the bulb from the holder and dispose of in accordance with local regulations.

Insert a new bulb into the bulb holder, taking great care not to touch the glass of the bulb. Keep the bulb in its protective sleeve until it is securely inserted into the bulb hold. Then carefully remove the protective sleeve from the bulb. Gently reinsert the bulb assembly into the duct and replace the support screws. Turn on the unit and the UV-C light, check the UV-C light inspection cover and confirm that the bulb is functioning. Perform the completion steps in section 6.2 of this document.

The bulb is extremely sensitive to oil and grease from skin and gloves. If this gets on the bulb is can cause the blub to burn out prematurely. Therefore, a bulb which is still operational and within its two-year working life, and a new bulb, must never be touched.

DO NOT LOOK AT THE BULB DIRECTLY WHEN IT IS SWITCHED ON! The UV-C light when viewed directly can damage the DNA in soft tissue such as eyes and cause other conditions such as skin cancer with prolonged direct exposure to the skin. Confirm operation only by observing the indicator plug. If unsure, contact your local equipment representative for assistance.

6.3.2 Stage 1 Filter Replacement

This stage one filter is to remove large dust and dirt particles and protect the stage two filter. This filter is to be replaced after every 3 months of operation.

To replace this filter the duct box section at the back or the unit needs to be removed. This section is connected to the unit with screws on all four sides connected to the unit, and to the duct behind it. These screws are to be removed and this section of duct can be removed to allow access to the filters.

The first filter is the stage one filter. It should be removed and placed in a sealed bag. It should be disposed of in accordance with local regulation governing the disposal of medical waste. The new filter can then be inserted.

Once the filter change is complete the duct is to be reconnected to the unit. At this point the completion steps in section 6.2 are to be performed.

6.3.3 Stage 2 Filter Replacement

The stage two filter removes particles down to 1 – 3 Microns, and is intended to protect and extend the life of the stage three filter. This filter is to be replaced after every 6 months of operation.

All tasks up to 6.3.2 above are to be performed first, then when the stage one filter is removed and disposed of the stage two filter is to be removed and disposed of at this time in the same manner.

The new stage two filter can then be inserted, followed by the new stage one filter. The completion steps in section 6.3.2 can then be followed to completion.

6.3.4 Stage 3 Filter Replacement

The stage three filter is a HEPA filter which removes particles down to 0.3 Microns. This is intended to stop any micro-organisms from being released into the atmosphere from inside the isolation facility. While these organisms are no longer harmful after passing the UV-C light, they are captured here as an extra level of defense. And while no longer harmful, they should be treated as though they are. This filter is to be replaced after ever 12 months of operation.

All tasks up to section 6.3.4 are the be performed first, then when the stage one and two filters are removed and disposed of, the stage three filter is to be removed and disposed of at this time in the same manner.

The new stage three filter can be inserted, followed by the stage two filter, and the stage one filter. The completion steps in section 6.3.2 can then be followed to completion.

6.3.5 Motor Maintenance

The motor installed in these units are maintenance free motors. Once the motor is confirmed to be working and moving air in the inspection stage no further maintenance is required.

If the motor is found to be non-functional the unit must be removed and sent to the device provider for inspection and repair.

Before the device is removed it should be properly disinfected and all filters removed and either disposed of or sealed and stored depending on age and degree of contamination.