AFRICA HEALTH HOLDNGS LIMITED Environmental and Social Management System ("ESMS")

This policy has been reviewed, approved and implemented by the management of Africa Health Holdings Limited (AHH). Additionally, it has been shared with the chief executive officer of each AHH brand company, who will be responsible for implementing the policy at the brand level.

Effective Date: February 1, 2021

1. Introduction

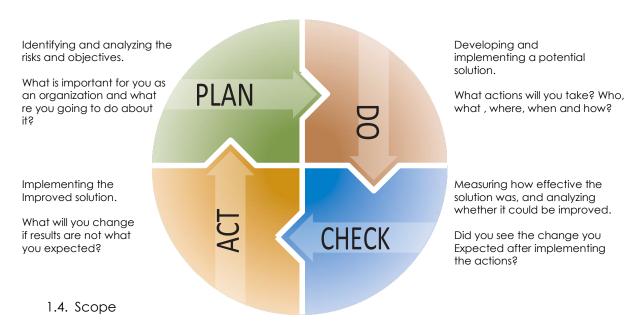
1.1. Overview

This Environmental and Social Management System ("ESMS") Manual has been developed for the Africa Health Holdings Limited ("AHH") and will be implemented by Africa Health Management LLC or its sub-contractors¹ (the "Manager"). AHH's Environmental and Social ("E&S") Policy requires that an ESMS, aligned with good international industry practice (GIIP) and tailored to the needs of AHH is implemented. As such, this document presents the ESMS Manual which outlines the roles and responsibilities in delivering the ESMS and the procedures that will be followed. The ESMS will be reviewed at regular intervals (not less than annually) and where required amended to reflect learnings and to ensure it is relevant to AHH's activities.

1.2. Background of AHH

Africa Health Holdings Limited is an Africa-focused healthcare company committed to delivering excellent and affordable patient care. Through technology and industry expertise, AHH is engaged in building a high quality, effective and sustainable healthcare system across Africa. Presently, we operate forty (40) healthcare facilities in Africa, particularly in Nigeria, Ghana and Kenya.

1.3. Approach. The approach the ESMS takes is founded in the four principles of Plan-Do-Check-Act ("PDCA") as specified in the globally recognized Good International Industry Practice ("GIIP") standard. The below figure outlines this approach and the ESMS has incorporated this within AHH's organizational structure.



The ESMS covers all phases of AHH's operations cycle, from inception, assessment of facilities, development of facilities, construction and operations, through AHH exit and covers the following actions:

¹ The sub-contractors include, Africa Health Management Ghana Limited and CarePoint Management Limited

- 1.4.1. Initial assessment and screening of all potential investments;
- 1.4.2. Categorization of potential E&S risks;
- 1.4.3. Detailed appraisal/due diligence and determination of the required E&S standards;
- 1.4.4. Identification of all required mitigation, monitoring and management measures to ensure compliance with appropriate standards;
- 1.4.5. Informed stakeholder consultation and engagement;
- 1.4.6. Grievance mechanism;
- 1.4.7. Inclusion of E&S requirements in AHH's legal documentation;
- 1.4.8. Monitoring of operational performance to ensure compliance with standards through to project exit;
- 1.4.9. Internal reporting on the E&S performance of financed projects to the Manager; and
- 1.4.10. External reporting to stakeholders.
- 1.5. Commitment to Continuous Improvement. AHH affirms its commitment to continuously improve the management and application of its E&S risk. This objective is also applicable to AHH's brand companies.

2. Environmental and Social Policy

AHH's E&S Policy provides the commitment and framework from which this ESMS has been developed and is presented below. This is a controlled document that is reviewed at regular intervals and updated as needed to ensure that it remains aligned with good international industry practice (GIIP) and the standards followed by AHH. Any individual policies governing E&S issues for our brand companies, for example health and safety; anti-bribery and corruption, whistleblower policy, worker conditions and rights; diversity and inclusion, are developed separately. These will be mandated for the brand company to implement as part of their own ESMS.

Scope of this Policy

This Policy applies to all AHH representatives, wholly owned and majority-owned companies, where AHH has management control. Where there is no conflict with this policy, AHH may adopt additional policies, in order to meet local regulatory requirements.

Objectives

We will continuously endeavor to enhance effective E&S management practices in all of our activities, operations and services, with a special focus on the following considerations:

Ensuring that applicable E&S requirements are met for all our acquisitions;

- Integrating environmental and social risk assessments into our acquisition due diligence process;
- Ensuring appropriate consultation and transparency in our activities; and
- Working together with our brands and business partners to put into practice applicable E&S requirements.

Environmental and Social Policy

- Ensure the sustainable and efficient use of resources:
- Prevent, or where this is not feasible to minimize and mitigate, pollution to air, water and land;
- Minimize our contribution to climate as best as possible;
- Avoid or otherwise minimize and mitigate degradation of natural habitats, biodiversity and ecosystem services;
- Promote a culture of safety and environmental stewardship by employees, brand, operational partners, consultants and contractors;
- Deliver positive contributions to the environmental conditions of the local area of our acquisitions;
- Strive to ensure that we practice recycling;
- Treat all employees, consultants and contractors fairly and respect their dignity, well-being and diversity and require the same of our brand companies;
- Comply with International Labour Organization's Fundamental Conventions and UN Declaration of Human Rights;
- Protect neighboring communities from any negative impact of our activities and strive to prioritize them in the distribution of benefits, for example employment;
- Strive to identify and manage differing impacts on women and men, young and elderly;
- Identify and manage local and cultural community sensitivities through comprehensive stakeholder engagement.

Engagement and Disclosure

- Ensure that our interactions and stakeholders are inclusive, transparent and are relationship building driven;
- Ensure that our acquisition plans positively affects the needs of our local communities, for instance, use of feasibility studies, when necessary;

- Provide mechanisms for stakeholders to raise issues and grievances;
- Plan townhall meetings to encourage employees, contractors and consultants raise issues concerning their work environment; and
- Publicly disclose this Policy and ensure that it is communicated to key stakeholders.

Governance and Business Integrity

- Conduct all of our business dealings with honesty, integrity, fairness, diligence and respect;
- Maintain zero tolerance of bribery, corruption, fraud, unethical behavior; and
- See to acquire healthcare facilities that commit to these values.

Development Impact

AHH seeks to achieve positive development outcomes in the countries it serves through its support of the following:

- Good health and well-being: designing facilities to be able to provide high-quality healthcare to the communities it serves:
- Promote gender equality and empower women by being an equal opportunity employer and creating outreach programs, which educate women on women's healthcare;
- Promote diversity in its workforce, by creating opportunities for candidates from underrepresented tribes and races to apply for, and obtain, employment in AHH;
- Providing long-term employment prospects for residents of the communities AHH's brand facilities serve; and
- Safety: creating an environmental, health and socially safety environment for employees, patients and members of the communities served by our brand facilities.

Development Impact

AHH is committed to continuous improvement of its E&S management. As such, this Policy and associated ESMS will be regularly reviewed as stipulated in this Policy and updated as required.

Policy Oversight and Implementation

This Policy has been adopted by AHH and is subject to frequent reviews and updates, as stipulated in this document. Ultimate responsibility for this Policy lies with the Chief Executive Officer, with oversight of its implementation carried out by the Board of Directors. All AHH employees, contractors and consultants, as well as its brand companies will contribute towards its success.

3. Organizational Structure (Environmental and Social Roles and Responsibilities)

The roles and responsibilities within AHH and related entities to implement the requirements of the ESMS are outlined in this section:



Position	ESMS Requirement	Other E&S Responsibilities
Board of Directors	Knowledge and understanding of AHH's ESMS.	Oversight responsibility.
Chief Executive Officer	Knowledge and responsibility to lead AHH's E&S strategy.	Ultimate responsibility to ensure that AHH discharges its overall E&S duties.
E&S Team	In depth knowledge and implementation.	 Enforcement of the ESMS implementation at AHH level;

		 Oversight of ESMS implementation at brand level; and Review and approval of the E&S workstreams for each country of operation, including budget.
Brand CEO	In depth knowledge.	 Enforcement of the ESMS implementation at brand level; Oversight responsibility of implementation by Head, Quality and Compliance and Brand Administrator.
Head, Quality and	In-depth knowledge and	Day-to-day implementation
Compliance	implementation.	of the ESMS.
Brand Administrator	In-depth knowledge and implementation.	Day-to-day implementation of the ESMS.

4. Occupational Health and Safety Plan

4.1. Improper Disposal of Healthcare Waste

Potential Worker Hazards

- Contamination of local environment due to inappropriate storage, treatment and disposal of hazardous medical waste;
- Release of toxic air emissions due to uncontrolled burning or dumping of medical waste.

Preventative and Protective Measures

- Avoid hazardous waste generation at hospitals by substituting products or equipment containing hazardous materials;
- Prohibit the open-air burning of waste;
- Restrict the access to and handling of waste to trained, authorized personnel only; and
- Eliminate incineration of any waste chemically treated with chlorinated disinfectants or containing chlorinated plastics.

Preparedness and Training

- Develop and implement policies and procedures for the proper segregation, labeling, storage (color-coded), treatment, and disposal of waste. Waste treatment and disposal should be conducted differently according to the type of waste, such as: the incineration of pathological and microbiological waste; the shredding and landfill of contaminated plastics; the deep burial of sharps in hard wall disposal containers; and waste immobilization of unwanted pharmaceuticals;
- Maintain records of all pits used for deep burial of waste;

- Train personnel on all policies and procedures; and
- Disinfect and treat biomedical waste as appropriate. Train staff to ensure that medical
 waste is treated for the necessary amount of time and with the accurate disinfecting
 method.

4.2. Improper Treatment of Liquid Effluents

Potential Worker Hazards

• Contamination of sewage system with multiple drug-resistant (MDR) bacteria.

Preventative and Protective Measures

- Develop and implement procedures regarding the prescription and disposal of antibiotics:
- Inform patients not to flush any unused drugs in the toilets;
- Conduct a water and waste audit to identify and quantify wastewater streams and wastewater contamination sources;
- Ensure that all clinical and other solid wastes are collected and disposed according to regulatory guidelines (e.g. incineration, immobilization, etc.) so that they do not interact with liquid waste streams.

Preparedness and Training

- Consult
- Train doctors on procedures to avoid unnecessary prescription or over-prescription of antibiotics;
- Train other health care personnel on the proper administration of antibiotics. Health care
 providers should ensure that patients finish their full course of prescribed antibiotics (even
 if they are feeling better) so that drugs are fully effective and do not breed resistance;
- Train cleaning and maintenance staff on the proper disposal of antibiotics; and
- Develop, implement and train personnel on infection prevention and control procedures. Procedures should prevent the spread of infection between individuals through hand-washing before and after patient contact; appropriate use of alcohol-based hand rub solutions; and the use of barrier equipment such as gloves, gown, masks and goggles. Procedures should also seek to prevent microbial transmission through contaminated surfaces, such as door handles, over-bed tables, and equipment, such as stethoscopes and blood pressure cuffs.

4.3. Lack of Potable Water and Emergency Water Supplies

Potential Worker Hazards

• Disruption of hospital services and adverse health impacts due to insufficient and contaminated water supply.

Preventative and Protective Measures

- Estimate flow rate per bed and hour in normal operating conditions. Install a waste disinfection unit and potable water storage tanks that can contain sufficient water to meet the requirements for an established period of time; and
- Develop and implement procedures for potable water disinfection and storage, including regular maintenance, cleaning and monitoring of the water disinfection unit and water storage tanks.

Preparedness and Training

- Conduct a water audit to identify opportunities for water conservation;
- Develop and implement water conservation policies and procedures;
- Make operational changes to improve water use efficiency, especially related to cleaning practices and laundry and food preparation activities;
- Train personnel on water conservation practices and post signs/checklists through the building about conserving water; and
- Increase patient and visitor awareness of the need to conserve water by placing signs in patient rooms and restrooms and publicizing the water conservation policy.

4.4. Contamination of Indoor Air

Potential Worker Hazards

Negative health impacts on employees and patients due to poor indoor air quality

Preventative and Protective Measures

- Implement an inspection and preventive HVAC maintenance program to prevent reoccurrence;
- Develop and implement policies and procedures related to the cleaning and servicing
 of the HVAC system. Regularly drain, clean and replace HVAC components (e.g. drain
 pans, ducts, air dampers, cooling towers, filters, etc.) to minimize the potential for
 microbial growth or contamination;
- Review and modify the orientation of air intakes and exhausts to eliminate crosscontamination from local pollution sources, such as parking areas, garages, loading zones and cooling towers;
- Relocate intake points or consider adding specialized filtration, such as activated carbon;

- Ensure that the minimum outside air damper settings are enough to provide adequate amounts of outside air and that these are not being closed inappropriately for energy efficiency; and
- Determine pressure relationships within the facility and implement engineering controls (air flows from positively pressurized to negatively pressurized spaces).

Preparedness and Training

- Train appropriate personnel to monitor air quality levels regularly and make the necessary adjustments in the HVAC system as required.
- Train staff to monitor carbon dioxide levels regularly and determine the adequacy of the outside air supply; and
- Train staff on an air circulation policy, where staff maintains open windows in common areas.
- 4.5. Excessive Overtime Causing Fatigue

Potential Worker Hazards

Worker fatigue and potential for workplace injuries and improper patient care.

Preventative and Protective Measures

- Establish, communicate and implement policies and procedures for working hours in keeping with industry standards and national laws, including provisions for overtime work, shift work, work at inconvenient times and on-call duty;
- Normal working hours should not exceed eight hours a day, unless there are exceptions in national law, collective bargaining agreements or other sources;
- Overtime should be in line with legal standard in the country of operation;
- Allow workers to refuse overtime without penalty;
- Ensure that all migrant employees can move freely within and outside the country, and that they are treated fairly and equally to national personnel;
- Encourage and work to provide training to clinical staff; and
- Identify tasks that can be transferred to other workers; recruit, hire, promote and train additional workers.

Preparedness and Training

- Train senior management, supervisors and workers about labor regulations regarding working hours and the linkages between excessive overtime and increase risk of workplace injury or illness and improper patient care;
- Train HR personnel to avoid scheduling tasks that are demanding, dangerous, safetycritical or monotonous during the night shift, particularly during the early morning hours when workers' alertness is lowest;

- Limit day shifts to a maximum of 12 hours (including overtime) and night shifts to 8 hours. Consider the needs of pregnant and older clinical staff, since they may be more vulnerable during night shift work and working long hours;
- Plan appropriate workloads for the length and timing of each shift. Schedule a variety
 of tasks to be completed during each shift to create a more dynamic working
 environment and increase workers' alertness;
- Implement an employee grievance mechanism and complaint resolution procedure for addressing worker concerns about excessive working hours or other issues; and
- Modify the timing of shifts or create more flexible working schedules to cover gaps in coverage and prevent excessive overtime and extended work shifts.

4.6. Proper Infection Control

Potential Worker Hazards

• Spread of disease to the local community, with potential for fatalities, especially in vulnerable populations.

Preventative and Protective Measures

- Develop and implement procedures for infection control to limit the transmission of organisms between patients, and between patients and staff. Procedures should include instructions for adequate hand-washing, glove use, appropriate aseptic practice, isolation strategies, and sterilization and disinfection practices;
- Restrict visitor and staff interaction with infected patients. Restrict patient movement through the hospital;
- Develop and implement procedures for the early detection of cases, especially by screening patients admitted from other hospitals and high-risk patients;
- Protect patients with appropriate use of prophylactic antimicrobials, nutrition, and vaccinations;
- Work with the local authorities and community to develop, communicate and implement preventative public infection control policies that encourage the following behavior: Wash hands often with soap and water for 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer. (Ensure that young children are taught proper hand washing practices.);
- Cover nose and mouth with a tissue when coughing or sneezing;
- Avoid touching eyes, nose and mouth with unwashed hands;
- Avoid personal contact with ill individuals; and
- Clean and disinfect frequently touched surfaces, such as doorknobs.

Preparedness and Training

- Train all staff to treat blood and body fluids from all patients as infectious, whether or not an infection has been confirmed. Utilize appropriate disposal techniques to prevent further spread of infection;
- Train all personnel to wear appropriate personal protective equipment (PPE), including gloves, gowns, and eye and face protection. Provided PPE in adequate sizes and quantities for personnel;
- Monitor and evaluate individuals who come in close contact with someone that has developed the virus for 14 days;
- Work with local authorities to improve cooperation and information-sharing locally, with other countries, and with international health organizations: Increase lab testing capacity to detect cases of the disease;
- Assist in the development of guidance and tools for health departments to conduct public health investigations when disease cases are suspected or confirmed;
- Provide recommendations for healthcare infection control and other measures to prevent spread of disease; and
- Assist in the dissemination of up-to-date information about the disease to the general public, international travelers, and public health partners.

5. Environmental and Social Management Procedures

- 5.1. Overview. This section sets out the environmental and social procedures that AHH shall follow during each stage of is operations, from initial screening through to eventual exit. The procedures cover two types of acquisitions that will be carried out by AHH: (a) Greenfield developments new facilities and operations developed by AHH; and (b) acquisition of existing facilities where opportunities exist in target countries;
- 5.2. Initial Screening.
 - 5.2.1. Objective. To assess whether the acquisition opportunity is in line with AHH's E&S Policy and associated standards to determine whether the opportunity can proceed to the next stage of full E&S Due Diligence;
 - 5.2.2. Procedural Requirements for Investment Screening. This section deals with the screening of greenfield developments and acquisition of operating healthcare facilities:
 - 5.2.2.1. Assessment against Prohibited Activities. The nature of the acquisition opportunity is to be compared against activities prohibited by AHH. If the operations of the potential acquisition include any of the businesses or activities which AHH consider prohibited, consideration of the acquisition opportunity must not proceed. If it does not include activities which are considered prohibited, the assessment will be undertaken;
 - 5.2.2.2. Screening against E&S Standards and acquisition categorization. During investment screening, the ESMS Team will work through the prospective opportunity to assess the likely environmental and social impacts. The nature of the E&S screening required will depend not only on the stage of the process,

but also on the stage of overall development of the facility/country if investing in an existing facility. For example, a facility/country that is in a very early stage of development may have very little environmental and social information, whereas a project in advanced development may be different. As part of the investment screening, the ESMS Team will identify the environmental and social categorisation of the project in line with the IFC and AfDB definitions as follows:

- Category A/Category 1: Business activities with potentially significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented;
- Category B/Category 2: Business activities with potentially limited adverse environmental or social risks and/or impacts that are few, generally site-specific, largely reversible, and readily addressed through mitigation measures; and
- Category C/Category 3: Business activities with minimal or no adverse environmental or social risks and/or impacts.

Each potential investment needs to be assessed according to its own E&S risk aspects and on an individual basis. The differentiating factors between AHH's acquisitions are likely to be whether it is greenfield or acquisition of an existing operation and the local E&S conditions where the facility is located. Outside of this, the risk profile of the acquisition envisaged, i.e. the facility construction and operations, are similar in nature.

As outlined in AHH's E&S Policy, AHH will not acquire facilities that are determined to be Category A/Category 1. Therefore, if the screening determines the acquisition is in this Category (or during the detailed due diligence phase) the investment will not be taken forward. It is unlikely that the acquisition will fall into a Category C/Category 3, meaning that most AHH acquisitions will most likely be in Category B/Category.

- 5.3. Detailed E&S Due Diligence of Acquisitions. The ESMS Team shall perform due diligence on the potential acquisition to identify all risks and impacts of the acquisition and define management plans to address these. The detailed due diligence phase, whilst low risk, may also identify risk and impacts associated with the acquisition that mean it cannot be taken forward. The overall objective is to de-risk the acquisition to take it forward to formalized legal agreements between the implementing parties;
- 5.4. Acquisition Agreement. Upon successful completion of the due diligence phase and primary approval by the management to proceed, the AHH team will cause to be drafted and negotiate legal agreements with relevant parties. The ESMS Team will ensure that E&S requirements are captured.
- 5.5. Brand Monitoring. Each brand will have a chief executive officer, who will be responsible for managing the operations of the facility(ies). In each case, the brand will implement the ESMS in accordance with AHH's Policy and the legal agreements. The following monitoring activities will be undertaken:
 - 5.5.1.Upon acquisition, the ESMS Team shall communicate with the brand and confirm at regular intervals that the brand is undertaking the obligations in compliance with this Policy or its own ESMS;

- 5.5.2. For all acquisitions, a representative of AHH shall visit the site to monitor the implementation and compliance with this Policy;
- 5.5.3. The brand head of quality and compliance will constantly communicate with the ESMS Team about issues and incidents that have arisen and corrective actions implemented;
- 5.5.4.The ESMS Team will promptly report to the Chief Executive Officer any actual or potential breach of the compliance requirements after becoming aware of it;
- 5.5.5.The ESMS Team shall as promptly as possible, and in any event no more than 7 days, after becoming aware of any activity by brand that does not comply with the E&S policy, such brand to implement a corrective action plan. If the brand does not implement a corrective action plan, the ESMS Team shall use all its commercially reasonable endeavours to redress this;
- 5.5.6.The brand should be required to notify the ESMS Team of any serious incident within 2 calendar days of its occurrence. The ESMS Team shall as soon as reasonably practicable and in any event within 7 calendar days after becoming aware of the occurrence, notify the Chief Executive Officer;
- 5.5.7. The Chief Executive Officer shall as promptly as possible, but in any event no later than the first board meeting after learning of the breach, provide the board of directors with a report of the breach and AHH's actions to cure the breach.
- 5.6. Reporting. AHH will complete the following reporting to investors:
 - 5.6.1.Incident Reporting any E&S incident will be reported after AHH becomes aware of the occurrence. The nature of the incident, accident or circumstance and the impact arising therefrom; the measures being taken, or plans to be taken, to address them and prevent any future similar event;
 - 5.6.2. Quarterly reporting In its quarterly letters to its shareholders, AHH shall report any E&S performance covering the brand including key actions during the period and a summary of any incidents that have occurred; and
 - 5.6.3. Annual Reporting In its end of year letter to its shareholders, AHH shall provide investors with any report related to an ESMS breach.

5.7. Exit.

- 5.7.1. Objective. Ensure that AHH's operations has been realized in conformance with its E&S Policy and has added value through implementation of the E&S Policy to present an attractive and low risk investment opportunity;
- 5.7.2. Procedural Requirements for Exit. At a reasonable time prior to planned exit, the ESMS. Team will prepare an E&S Exit Plan. The E&S Exit Plan will include the following considerations:
 - 5.7.2.1. Initial E&S screening of potential investor(s);
 - 5.7.2.2. KYC, including anti-bribery and money laundering checks;
 - 5.7.2.3. Examination of the preferred investors track record on E&S issues and management;

5.7.2.4. Interview with the preferred purchasers management in terms of their intentions going forward for E&S management of AHH and its assets.

6. Emergency Preparedness and Response Plan

- 6.1. The key to effective response is effective preparation. The following steps will help AHH to anticipate the possible scenarios and prepare accordingly:
 - 6.1.1.Identify the areas where accidents and emergency situations may occur, and communities and individuals that may be impacted;
 - 6.1.2. Develop response procedures for each identified emergency situation that clearly explain what actions need to be taken;
 - 6.1.3. Provide the necessary equipment and resources to effectively implement the response plans. E.g. a stockpile of fire extinguishers does not put out fires, unless people can effectively find and use them when needed;
 - 6.1.4. Assign responsibilities so that each activity has people responsible for carrying it out. Also designate people who will routinely analyze how well the system is working and update the risk assessment and plans;
 - 6.1.5.Communicate so that everyone in the facility understands the importance of the emergency preparedness and response system and is encouraged to help monitor and improve its effectiveness. Also include people in the community who may be affected, if it is appropriate;
 - 6.1.6. Provide periodic training so that everyone in the facility has an overview of the system, and knows the response plans;
 - 6.1.7. Work with government agencies and community groups to identify areas where you can collaborate to respond effectively to internal and external situations;
 - 6.1.8. Conduct periodic checks and drills to test how well the system is working and to reassess the risks to reflect changing conditions. Incorporate your findings to continually improve your system;
- 6.2. An Emergency Preparedness and Response Plan Should Include:
 - 6.2.1.identification of potential emergencies based on hazard assessment;
 - 6.2.2.procedures to respond to the identified emergency situations;
 - 6.2.3.procedures to shut down equipment;
 - 6.2.4.procedures to contain and limit pollution;
 - 6.2.5.procedures for decontamination;
 - 6.2.6.procedures for rescue and evacuation of staff and patients, including a designated meeting place outside the facility and strategies to relocate patients in need of continual monitoring and care;

- 6.2.7. location of alarms and schedule of maintenance:
- 6.2.8. list and location of equipment and facilities for employees responsible for responding to the emergency (fire-fighting equipment, spill response equipment, personal protection equipment for the emergency response teams, first aid kits and stations);
- 6.2.9. protocols for the use of the emergency equipment and facilities;
- 6.2.10. schedule for periodic inspection, testing and maintenance of emergency equipment;
- 6.2.11. clear identification of evacuation routes and meeting points;
- 6.2.12. schedule of trainings (drills), including with local emergency response services (fire fighters);
- 6.2.13. procedures for emergency drills;
- 6.2.14. emergency contacts and communication protocols, including with affected communities when necessary, and procedures for interaction with the government authorities;
- 6.2.15. procedures for periodic review and update of emergency response plans.
- 6.3. Common Occupational Health and Safety (OHS) Hazards and Emergency Situations in Healthcare Facilities.

OHS hazards in the workplace can be divided into five (5) categories; physical, chemical, biological, ergonomic and radiological.

OHS emergency situations often occur because of gaps in a management system. Thus, even though the hazards may seem to be very different, such as slips and falls on spilled liquids vs. exposure to radiation, they are often the result of the same root cause – ineffective implementation of the ESMS. The tables below describe common workplace hazards and their associated potential impacts. They also illustrate how inadequate implementation of any of the 9 ESMS elements can be the root cause of such situations. Note, however that the examples below are not an exhaustive list of root causes.

Physical Hazards

Examples	Potential Hazards
 Slipping on wet floors, spilled liquids or bodily fluids; 	Sprains and strains;
Interaction with unguarded or	• Fractures;
improperly operated machines (e.g. kitchen equipment);	Cuts and amputations;
kilenon oquipmeni),	Burns and scalds;

- Handling hot or sharp items from autoclaves or sterilizers;
- Exposure to high noise levels (e.g. in laundry area);
- Exposure to high temperatures (e.g. in laundry area or kitchen);
- Use of medical lasers;
- Touching faulty or damaged electrical cords or wires;
- Involvement in a vehicular accident (e.g. due to traffic near the emergency entrance);
- Violent assault from patients or their attendants;
- Ignition of medical (e.g. oxygen hood or cauterizing devices), lighting or cooking equipment; and
- Explosion of medical gas cylinders.

- Hearing threshold shifts and loss;
- Heat stress, dehydration, heat stroke;
- Eye injuries;
- Electric shock or electrocution;
- Asphyxiation and burning in case of fire:
- Death.

Fires or explosions from ignited equipment or gas can lead to massive loss of life and destruction of property.

Potential Root Causes

Management Program: Monitoring and Review: Organizational Capacity and Competency: Insufficient worker Lack of tracking of accidents Lack of inadequate, or training on safety and near-misses. improperly implemented procedures; safety procedures and equipment procurement and maintenance. Failure to assign a responsible party for managing safety hazards; and Failure to train contract or temporary workers.

Chemical Hazards

Examples

- Exposure to hazardous drugs through inhalation, skin contact, skin absorption, ingestion or injection;
- Exposure to hazardous vapors, fumes or gases (e.g. mercury, ammonia, formaldehyde, ethylene oxide, waste anesthetic gases);
- Skin contact with hazardous chemicals (e.g. sterilizers and disinfectants, such as glutaraldehyde);
- Prolonged exposure to latex;
- Ignition of improperly stored and handled flammable substances (e.g. ethylene oxide)

Potential Hazards

- Headaches, nausea, dizziness;
- Decreased mental abilities;
- Skin irritation and burns;
- Irritation of eyes, nose and throat;
- Respiratory disorders;
- Damage to internal organs;
- Damage to nervous, immune, and reproductive systems;
- Cancer;
- Allergic reactions;
- Asphyxiation or burning in case of fire;
- Death.

Potential Root Causes

Emergency Preparedness and Response:

- Lack of or inadequate emergency response plan in case of extreme chemical exposure; and
- Insufficient or ineffective worker training and mock drills.

Management Program:

- Use of incompatible or damaged storage containers;
- Uninformed or incorrect labeling;
- Insufficient monitoring of allowable chemical concentrations in the workplace;
- Inability to follow Material Safety Data Sheets instructions; and
- Inadequate PPE.

Monitoring and Review:

Fail to monitor and review work practices to ensure that chemical safety procedures are being followed and improved as needed

Biological Hazards

Examples Potential Hazards

- Exposure to bloodborne pathogens (e.g. hepatitis B or C and HIV) or other bodily fluids that may carry diseases (e.g. Ebola or Covid-19 or methicillinresistant Staphylococcus aureus);
- Exposure to nosocomial infections;
- Needlestick and sharps injury;
- Exposure to surgical smoke plume; and
- Exposure to foodborne illness due to contaminated food (e.g. E-coli or salmonella).

- Debilitating diseases among workers and patients;
- Death; and
- Spread of diseases among local communities impacting public health and local economic productivity.

Potential Root Causes

Management Program: Stakeholder Engagement Monitoring and Review: Lack of or inconsistent Lack of inadequate Failure to monitor and review hand-washing stakeholder engagement to work practices to ensure that methods; address potential spread of safety procedures are being followed and improved as diseases within the facility or Failure to use universal to the local community. needed to address biological precautions; risks. Improper labeling, storage or mishandling of biological materials, needles and sharps; Ineffective exposure control plan; and Inadequate PPE.

Ergonomic Hazards

Examples	Potential Hazards
 Handling, lifting or positioning patients (especially immobile patients) or heavy loads; 	 Strains and sprains to muscles and connective tissues causing pain, inflammation, numbness, or loss of muscle function; and
 Repetitive motions, especially in an awkward position; 	Lower back injuries.

- Extended periods of standing (e.g. during long surgeries or procedures); and
- Continued forceful exertion.

Potential Root Causes

Policy:

Lack of, inadequate, or improperly implemented ergonomic safety policies and procedures.

Identification of Risks and Impacts:

- Inadequate risk assessment to identify ergonomic hazards;
- Lack of worker consultation in designing work areas and processes; and
- Lack of worker awareness about ergonomic hazards in the facility.

Organizational Capacity and Competency:

- Insufficient worker training on proper methods of performing duties (e.g. proper ways to lift patients or heavy materials);
- Failure to assign a responsible party for managing ergonomic hazards; and
- Insufficient number of staff to perform duties.

Radiological Hazards

Examples	Potential Hazards
Exposure to radiation from portable or fixed x-ray machines or radiation therapy.	Nausea, vomiting, stomach pains or diarrhea;
	Radiation sickness;
	Cancer; and
	• Death.

Potential Root Causes

Identification of Risks and Impacts:

Lack of awareness of radiation sources and associated risks in the facility.

Management Program:

 Use of expired radiation licenses or improperly maintained radiation sources;

Organizational Capacity and Competency:

 Insufficient worker training on proper radiation controls; and

 Deficient procedures regarding allowable exposure limits and worker exposure periods; and 	 Failure to assign a responsible party for managing radiological hazards.
 Inadequate PPE. 	

7. Stakeholder Engagement Plan

The AHH Stakeholder engagement strategy reflects the following core values:

Responsive	Actively listen to and understand stakeholder needs; and
	 Use evaluation and data and show stakeholders how results will be used.
Inclusive	 Welcome a diverse set of voices and respect their roles;
	Build relationships and find new participants to enrich dialogue; and
	 Involve those that are harder to reach for reasons such as language, culture, age or mobility.
Transparent and Accessible	 Provide information so stakeholders can participate in a meaningful way; and
	 Information, agendas, goals, and presentations are available.
Outcomes Driven	Focus on the future – emphasize what can be done; and
	Act on feedback. Apply learning to improve reforms.

Stakeholder and Engagement

Government	State legislature;	 Periodic meetings;
	• Elected Officials;	Maintaining
	 health departments; 	relationship with key personnel ; and
	 Environmental Protection Agencies; 	 Assisting with community service.
	Social Services;	

Tribal Leaders	 Consumer Protection Agencies; Police Department; and Labor departments. Local Kings Chiefs District heads 	 Periodic meetings; Maintaining relationship; and Organizing community service programs.
Organizations and Coalitions	 Non-profit Organizations; International health organizations 	 Engage with leadership; Create partnerships for research and health outreach programs
Community Services	 Faith-based organizations; and Youth services. 	 Engage in periodic community service; and Community stakeholder presentations.
Business and Industry	Health Insurance; andFood and beverage.	Maintain strong relationship with key personnel
Medical	 Specialist Hospitals; Teaching Hospitals; Community health centers; Clinics; Traditional Birth Attendants; and Clinical Employees 	 Maintain partnerships; Engage for collaboration and research; and Conduct periodic relationship building exercises.
Education Non-clinical Employees	• Schools	Create partnerships.Townhall meetings;Employee survey; and

	Engage periodically to determine their grievances and help create a strong working environment.
Patients	 Patient satisfaction survey; and
	 Engage frequently to determine their grievances and help create a strong working environment.

8. Grievance Mechanism

A grievance is a formal notified complaint made by people who feel they have been adversely affected by activities associated with our operations. A grievance mechanism is established to ensure that such complaints are addressed in good faith, through a transparent and impartial process and in a timely manner. It also provides a mechanism for stakeholders to continue to engage with the portfolio company and is an important risk management system in turn.

The AHH website has a whistleblower platform, which is easily accessible and simple to navigate.

- 8.1. Other Grievance Mechanism for AHH's brand companies:
 - 8.1.1.Direct lodging and resolution with the brand company local communities, workers and other stakeholders will have the opportunity to lodge grievances directly with the brand company head of quality and compliance or hospital administrator. The grievance can be received either electronically, written format or verbally. The head of quality and compliance will record the grievance and monitor the progress. In consultation with the relevant person or department responsible for the nature of the grievance raised, the head of quality and compliance will attempt to resolve the grievance with the complainant directly.
 - 8.1.2. Where it is not possible to resolve the grievance between the two parties, the grievance will be referred to a grievance committee which will involve the chief executive officer of the brand and the head of quality and compliance representing the brand and the grievance lodger and his/her representative to mediate. The aim is that a resolution can be put forward by the committee that is acceptable to both parties.
 - 8.1.3. Where it is still not possible to resolve the grievance through the committee the complainant can resort to arbitration.