

**FDRE MINISTRY OF HEALTH  
ETHIOPIAN PUBLIC HEALTH INSTITUTE  
AFRICA CDC REGIONAL INVESTMENT FINANCING PROJECT  
(P167916)**

**Environmental and Social Management Plan for Addis Ababa  
Bole International Airport Point of Entry Isolation Center**



**Submitted by: Ministry of Health and Ethiopian Public Health Institute**

**Submitted to: World Bank Country Office (ACDC Project Environmental and Social Safeguards Team)**

**January, 2026  
Addis Ababa, Ethiopia**

# Table of Contents

|  |           |
|--|-----------|
| <b>LIST OF TABLE</b> .....   | <b>4</b>  |
| <b>LIST OF FIGURE</b> .....  | <b>4</b>  |
| <b>LIST OF ABBREVIATIONS</b> .....   | <b>4</b>  |
| <b>EXECUTIVE SUMMARY</b> .....   | <b>5</b>  |
| <b>1. INTRODUCTION</b> .....   | <b>7</b>  |
| 1.1. BACKGROUND.....   | 7         |
| 1.2. OBJECTIVES OF THE ESMP .....  | 8         |
| 1.2.1. <i>General objective</i> .....  | 8         |
| 1.2.2. <i>Specific objectives</i> .....  | 8         |
| 1.3. SCOPE OF THE ESMP .....   | 9         |
| 1.4. METHODOLOGY .....   | 9         |
| 1.4.1. APPROACHES OF THE ESMP .....  | 9         |
| 1.4.2. DATA RECORD REVIEW .....  | 9         |
| 1.4.3. FIELD VISITS AND OBSERVATION .....  | 10        |
| 1.4.4. STAKEHOLDER AND PUBLIC CONSULTATIONS .....  | 10        |
| 1.5. PROJECT DESCRIPTION.....  | 11        |
| 1.6. LAND ACQUISITIONS.....  | 14        |
| <b>2. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)</b> .....  | <b>15</b> |
| <b>3. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN MONITORING PLAN AND INSTITUTIONAL ARRANGEMENT</b> ..... | <b>28</b> |
| 3.1. INSTITUTIONAL ARRANGEMENT, ROLES AND RESPONSIBILITIES FOR ESMP IMPLEMENTATION.....                | 28        |
| 3.2. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) MONITORING PLAN .....                             | 29        |
| <b>4. TRAININGS AND CAPACITY BUILDING PLAN</b> .....   | <b>41</b> |
| <b>5. GRIEVANCE READDRESS MECHANISM</b> .....  | <b>41</b> |
| <b>6. MONITORING THE IMPLEMENTATION OF ESMP</b> .....  | <b>44</b> |
| 6.1. INTERNAL MONITORING.....  | 44        |
| 6.2. EXTERNAL MONITORING/AUDITING .....  | 45        |
| 6.3. MONITORING PARAMETERS AND INDICATORS .....  | 45        |
| 6.4. REPORTING .....   | 45        |
| <b>7. EMERGENCY PREPAREDNESS AND RESPONSE PLAN</b> .....   | <b>46</b> |
| 7.1. KEY PERSONNEL AND THEIR RESPONSIBILITIES .....  | 46        |
| 7.2. EMERGENCY SCENARIOS AND PROCEDURES .....  | 47        |
| <b>8. STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE</b> .....                                      | <b>49</b> |
| <b>ANNEX</b> .....   | <b>50</b> |
| <b>ANNEX 2: MINUTES OF THE STAKEHOLDER CONSULTATION BIA POINT OF ENTRY ISOLATION CENTER</b> .....      | <b>51</b> |
| <b>ANNEX 3: ENVIRONMENTAL AND SOCIAL SCREENING REPORT OF BIA ISOLATION CENTER</b> .....                | <b>53</b> |

|  |           |
|--|-----------|
| <b>ANNEX 4: CHECKLIST FOR DATA COLLECTION.....</b>   | <b>58</b> |
| <b>ANNEX 5: CONSTRUCTION SITE SAFETY REQUIREMENT CHECKLIST.....</b>  | <b>60</b> |
| <b>ANNEX 6: INCIDENT REPORT FORM .....</b>   | <b>62</b> |
| <b>ANNEX 7: STANDARD GRIEVANCE APPLICATION FORMAT .....</b>  | <b>65</b> |
| <b>ANNEX 8: ENVIRONMENTAL AND SOCIAL CLAUSES .....</b>   | <b>66</b> |
| <b>ANNEX 9: CHANCE FIND PROCEDURES .....</b>   | <b>75</b> |
| <b>ANNEX 10: GRIEVANCE REDRESS MECHANISM (GRM).....</b>  | <b>76</b> |
| <b>ANNEX 11: WASTE TRANSPORTATION OR TRANSFER (ADOPTED FROM EFDA HEALTHCARE WASTE<br/>MANAGEMENT DIRECTIVE, 2005) .....</b>  | <b>81</b> |
| <b>ANNEX 12: OPERATIONAL ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (O-ESMP) .....</b>   | <b>83</b> |
| <b>ANNEX 11: LIST OF EXPERTS INVOLVED IN THE PREPARATION OF THE ENVIRONMENTAL AND<br/>SOCIAL MANAGEMENT PLAN (ESMP).....</b> | <b>87</b> |

## List of Table

|   |    |
|---|----|
| Table 1: Environmental and Social risks mitigation measures and implementation plan .....       | 15 |
| Table 2: Environmental and Social risks mitigation measures and implementation plan .....       | 29 |
| Table 3: Identified Trainings for Bole Airport Isolation Center ESMP Implementation .....       | 41 |
| Table 4: Key Personnel and Their Responsibilities for Emergency Preparedness and Response ..... | 46 |
| Table 5: Emergency Scenarios and Procedures .....   | 47 |

## List of Figure

|  |    |
|--|----|
| Figure 1: Field Visit to Project Site .....                              | 10 |
| Figure 2: Proposed Bole Airport Isolation Center Construction Site ..... | 12 |
| Figure 3: Design Floor Layout of the Isolation Center .....              | 13 |

## List of Abbreviations

|        |  |
|--------|--|
| AAEPA  | Addis Ababa Environmental Protection Authority       |
| BIA    | Bole International Airport                           |
| CoC    | Code of Conduct                                      |
| E&S    | Environment and Social                               |
| EFDA   | Ethiopian Food and Drug Authority                    |
| EPHI   | Ethiopian Public Health Institute                    |
| ESMF   | Environmental and Social Management Framework        |
| ESMP   | Environmental and Social Management Plan             |
| ESS    | Environment and Social Standard                      |
| GBV    | Gender-based violence                                |
| GRM    | Grievance Redress Mechanism                          |
| MoH    | Ministry of Health                                   |
| OHS    | Occupational Health and Safety                       |
| O-ESMP | Operational Environmental and Social Management Plan |
| PMU    | Project Management Unit                              |
| PPE    | Personal protective equipment                        |
| SEA    | Sexual Exploitation and Abuse                        |
| SH     | Sexual Harassment                                    |
| WHO    | World Health Organization                            |

## **Executive Summary**

This Environmental and Social Management Plan (ESMP) outlines the strategies and measures for identifying, preventing, and mitigating potential impacts associated with the construction and operation of a dedicated Isolation Center at Addis Ababa Bole International Airport.

During the construction phase, medium to high environmental and social risks were identified mainly related to site preparation and building activities within the active airport environment. Key impacts include dust and air emissions from earthworks and machinery, increased noise and vibration affecting nearby airport facilities, and occupational health and safety (OHS) risks to workers. Additional social risks include traffic safety issues from construction vehicle movements, potential GBV/SEA/SH risks associated with labor influx, and improper management of construction waste. To mitigate these impacts, the ESMP proposes strict application of World Bank EHS Guidelines, dust suppression through water spraying and covered material transport, noise control through equipment maintenance and restriction of night works, segregation and proper disposal of construction waste, enforcement of OHS measures including PPE and safety training, traffic management plans, and implementation of a Code of Conduct and GBV/SEA/SH prevention measures.

During the operation phase, the most significant impacts relate to public health, biosafety, and waste management. While the project has strong positive impacts such as improved disease surveillance, enhanced emergency preparedness at the point of entry, and creation of permanent employment it also poses high risks of occupational exposure to infectious agents, chemical hazards from disinfectants, and generation of infectious and hazardous medical waste. There is also potential disturbance from increased ambulance traffic and sirens, and risks related to human rights, restricted movement of suspects, and GBV. The ESMP addresses these through engineering controls (negative-pressure isolation rooms, containment systems), administrative controls (standard operating procedures, access control, and incident reporting), provision and strict use of PPE, regular staff training, vaccination and health surveillance, and safe segregation, storage, and disposal of medical waste in line with national and WHO standards.

Moreover, the ESMP establishes an integrated mitigation framework covering design, construction, and operation, supported by continuous monitoring, stakeholder engagement, and a functional Grievance

Redress Mechanism. Responsibilities are clearly assigned to contractors during construction and to EPHI and MoH during operation, with routine inspections, internal and external monitoring, and emergency preparedness plans ensuring that residual risks are minimized and managed throughout the project lifecycle.

The estimated cost for implementing mitigation measures during the construction phase is 41,000.00 for all construction period, whereas the projected Environmental and Social (E&S) management expenditure for the operational phase is anticipated at birr 546,000 per annual including training costs. The cumulative management cost encompassing all project phases' amounts to birr 587500.00 with an additional allocation of birr 1,200,000 earmarked for capacity building i.e training.

## **1. Introduction**

### **1.1. Background**

The Africa CDC Regional Investment Financing Project (ACDCP) is supported by the World Bank (WB) and is being implemented by Africa CDC, the Governments of Ethiopia (GoE) and Zambia. It aims to support Africa CDC to strengthen continental and regional infectious disease detection and response systems. The project will support vital institutional capacities for measurable functions by the Africa CDC Headquarters in Addis Ababa, the SA-RCC in Lusaka, and the Ethiopian and Zambian health ministries.

The activities supported by ACDCP are organized under five strategic components: (i) governance, advocacy and operational frameworks; (ii) public health assets; (iii) human resource development; (iv) project management support; and (v) a Contingent Emergency Response Component (CERC) for Ethiopia and Zambia. The component of public health assets is aimed at building the national and, regional capacities and systems for the prevention, detection and response to public health threats. The Africa CDC project require the implementation of the World Bank's operational policy. During the development and approval phases of the project, an Environmental and Social Management Framework (ESMF) was developed in accordance with the World Bank's environmental and social safeguard policies. As outlined in the project ESMF, each sub-project must undergo Environmental and Social Impact (ESI) screening to determine which environmental and social safeguarding instruments (such as ESIA, Partial ESIA, ESMP, or C-ESMP) are necessary.

To ensure compliance with national and World Bank environmental and social Framework (ESF), the environmental and social screening was undertaken for Bole Airport Isolation Center. Based on the environmental and social screening, the Bole Airport Isolation Center sub-project rated as substantial risk due to the following scenarios:

- *As the project will be executed within the existing Addis Ababa Bole International Airport where health care waste management system is not available. However, the Isolation center will operate only when suspect is found.*
- *Since the risk associated with an isolated traveler is uncertain until lab test results are available, which could indicate a high risk,*

- *Identified potential impacts, such as Occupational Health and Safety (OHS) risks, solid and liquid waste generation, and air emissions, are anticipated to be long-term throughout the project operation.*
- *In addition, Gender based Violence risk and human right violation risk is also significant as the isolation center operation may limit the movement of suspects.*

The sub-project is anticipated to present several medium risk impacts, primarily concerning soil erosion from construction practices, groundwater contamination risks from waste disposal, increasing local noise levels, and air pollutants, as well as high-rated risks to human health from occupational hazards and the potential spread of communicable diseases, and the generation of substantial solid and hazardous wastes (including infectious medical waste). These identified significant adverse impacts, particularly concerning waste management, public health, and pollution, necessitate the development of an Environmental and Social Management Plan (ESMP) to systematically mitigate these risks, manage waste streams, control pollution, and protect community and worker health throughout the project's lifecycle.

## **1.2. Objectives of the ESMP**

### **1.2.1. General objective**

The general objective of this ESMP is to identify and provide a framework for the effective management of environmental and social issues throughout the construction and operation phases of a dedicated Isolation Center at Addis Ababa Bole International Airport, thereby minimizing adverse impacts and enhancing positive outcomes.

### **1.2.2. Specific objectives**

- To identify potential environmental and social impacts (both positive and negative) associated with the project activities.
- To propose feasible and cost-effective mitigation measures for identified adverse impacts.
- To ensure that the project comply with national environmental policies, legislation, and the World Bank's ESSs;
- To outline an environmental and social management and monitoring plan to track the effectiveness of mitigation measures.
- To define roles and responsibilities for the implementation and monitoring of the ESMP.

- To establish a clear grievance redress mechanism for addressing community and stakeholder concerns.
- To ensure compliance with relevant national environmental and social policies, legislation, and international best practices.
- To estimate the financial resources required for the effective implementation of the ESMP.

### **1.3. Scope of the ESMP**

This ESMP addresses all phases of the project, from the design, which will integrate environmental and social considerations, through all construction activities including site preparation, the building of the isolation center. Furthermore, it encompasses the entirety of the operation phase, covering all day-to-day functions of the center.

### **1.4. Methodology**

#### **1.4.1. Approaches of the ESMP**

The ESMP approach was developed to meet the requirements of Proclamation № 299 of 2002, and according to Environmental and Social Impact Assessment (ESIA) Guideline with Respect to Integrated Risk Management (IRM) (2020).

Up on Bole Airport Isolation Center Construction Project identification, an Environmental and Social (E&S) screening was conducted to assess the potential environmental and social impacts associated with the proposed project. This screening adhered to the methodology outlined in the approved project Environmental and Social Management Framework (ESMF). The assessment employed the standardized Environmental and Social Screening Checklist outlined in the project ESMF Annex, which rated the project's potential impacts as Moderate. Accordingly, it recommended the preparation of an Environmental and Social Management Plan (ESMP) to effectively manage and monitor the identified impacts.

Then, a mixed-methods approach was utilized to prepare ESMP. Both primary and secondary data collection and analysis was performed, incorporating qualitative and quantitative data. Moreover, physical observations and stakeholder consultation were conducted at project sites. Questionnaires were designed to collect information on the project's impacts and risks, aiding in the development of an environmental and social management plan.

#### **1.4.2. Data Record Review**

A checklist was employed to identify key information sources and the relevant data required from each source. Furthermore, pertinent documents were collected to provide essential baseline information on demographic trends, land use practices, climate conditions, and both local and national development strategies and policies.

### **1.4.3. Field Visits and Observation**

The field visits primarily concentrated on a physical assessment of the project area, examining landform trends, land use patterns, biodiversity, and the presence of residential structures, waste management facilities, and other properties such as buildings and facilities impacted by the project. Additionally, the evaluation included an assessment of the waste management facilities available in Addis Ababa to gauge their capacity and current conditions. These field assessments were designed to precisely identify the enabling conditions and environmental features near the project site that may be affected and to recognize both potential positive and negative impacts.



Figure 1: Field Visit to Project Site

### **1.4.4. Stakeholder and Public Consultations**

Stakeholder consultation and community participation are fundamental components of the Environmental and Social Management Plan Preparation. The proposed Bole Airport Isolation Center is located within the Bole International Airport. There is no residential area within 2 km radius. However, the project site is near to the airport VIP Entry area. Hence, several discussions were made with Bole International Airport Construction Department and Ethiopia's National Intelligence and Security Service (NISS) regarding the proposed project and how to construct without affecting the existing services.

## 1.5. Project Description

Addis Ababa Bole International Airport (BIA) stands as a primary global aviation hub and a vital gateway to Africa, managing millions of international passengers each year. This significant connectivity, while economically essential, increases the risk of cross-border transmission of emerging infectious diseases (EIDs). In response to these public health challenges and to ensure full compliance with the **International Health Regulations (IHR 2005)**, the Ministry of Health and the Ethiopian Public Health Institute (EPHI), in collaboration with the Ethiopian Airlines Group, have initiated the construction of a permanent, state-of-the-art Isolation Center within the airport premises. This facility is designed to serve as a critical frontline defense for the rapid detection, containment, and management of symptomatic travelers, thereby reinforcing national health security.

The proposed facility is strategically situated at coordinates **8°59'03.6"N 38°48'19.8"E**, occupying a designated **245 m<sup>2</sup>** footprint within the airport compound in strict accordance with the airport's master plan. To optimize land use and adhere to the specific height requirements for buildings in this high-security aviation zone, the structure is designed as a two-story (**G+1**) building. The project yields a total gross floor area of **490 m<sup>2</sup>**, providing a compact yet highly efficient environment for specialized medical screening and emergency response.

The internal layout is meticulously partitioned to ensure biological safety and operational efficiency. Half of the total floor area (**245 m<sup>2</sup>**) is dedicated exclusively to isolation rooms, while the remaining **245 m<sup>2</sup>** is allocated to a comprehensive suite of support and administrative facilities. These include a dedicated triage center, examination rooms, a sample collection unit, and a specialized decontamination room. Furthermore, the building incorporates essential operational spaces such as medical duty rooms, administrative offices, and sanitation facilities, ensuring a self-contained environment that can operate independently during health emergencies.

The architectural design takes into account the complex logistics of an active international airport. The building's shape and orientation are optimized for standard medical service widths and administrative office requirements, while also considering surrounding circulation paths and access roads. By integrating seamlessly with existing airport infrastructure, the Isolation Center ensures that suspected cases can be transitioned from terminal areas to the clinical setting safely

and swiftly, without disrupting the standard flow of airport operations or compromising the safety of the general public.

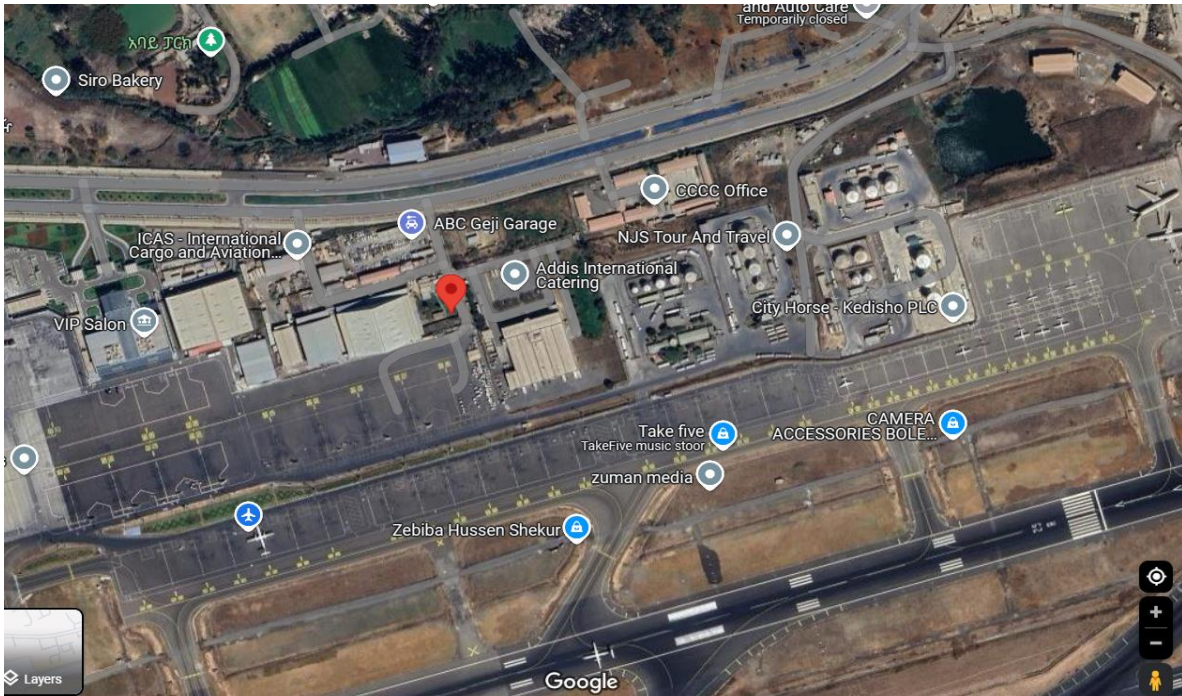
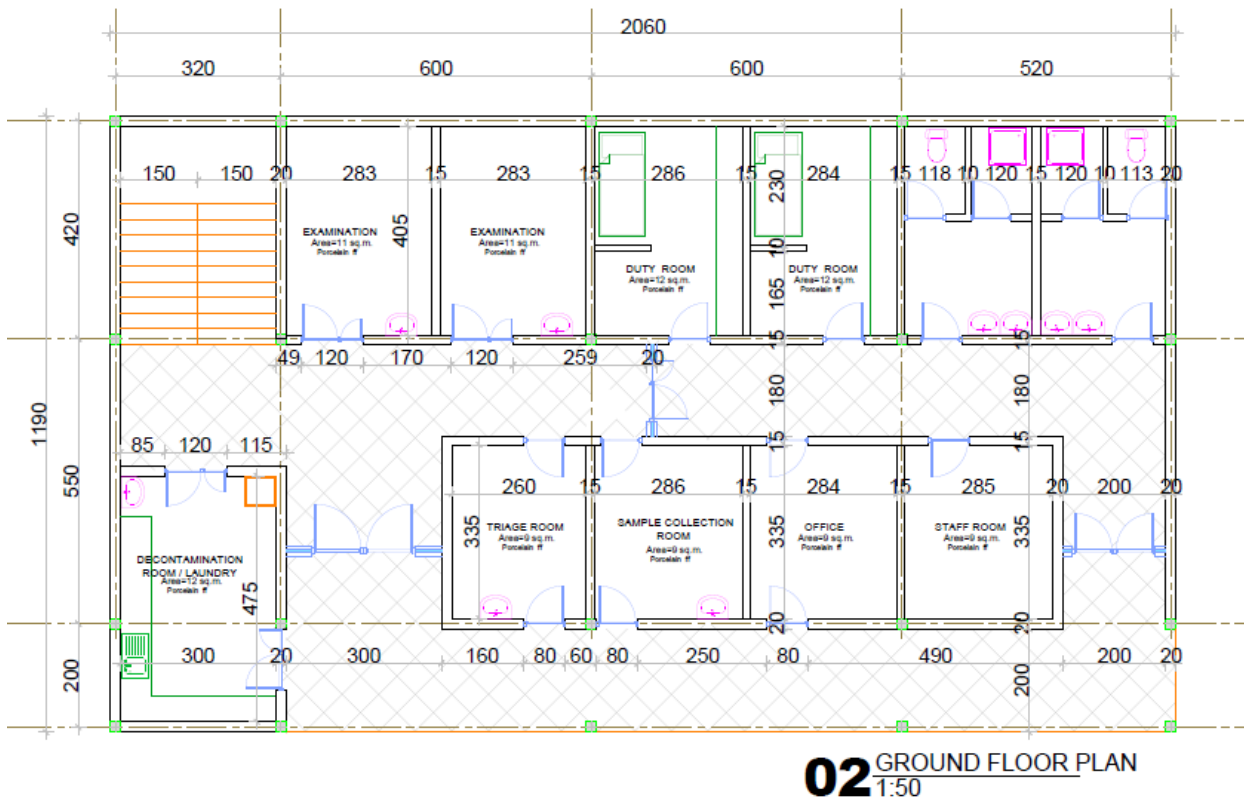


Figure 2: Proposed Bole Airport Isolation Center Construction Site



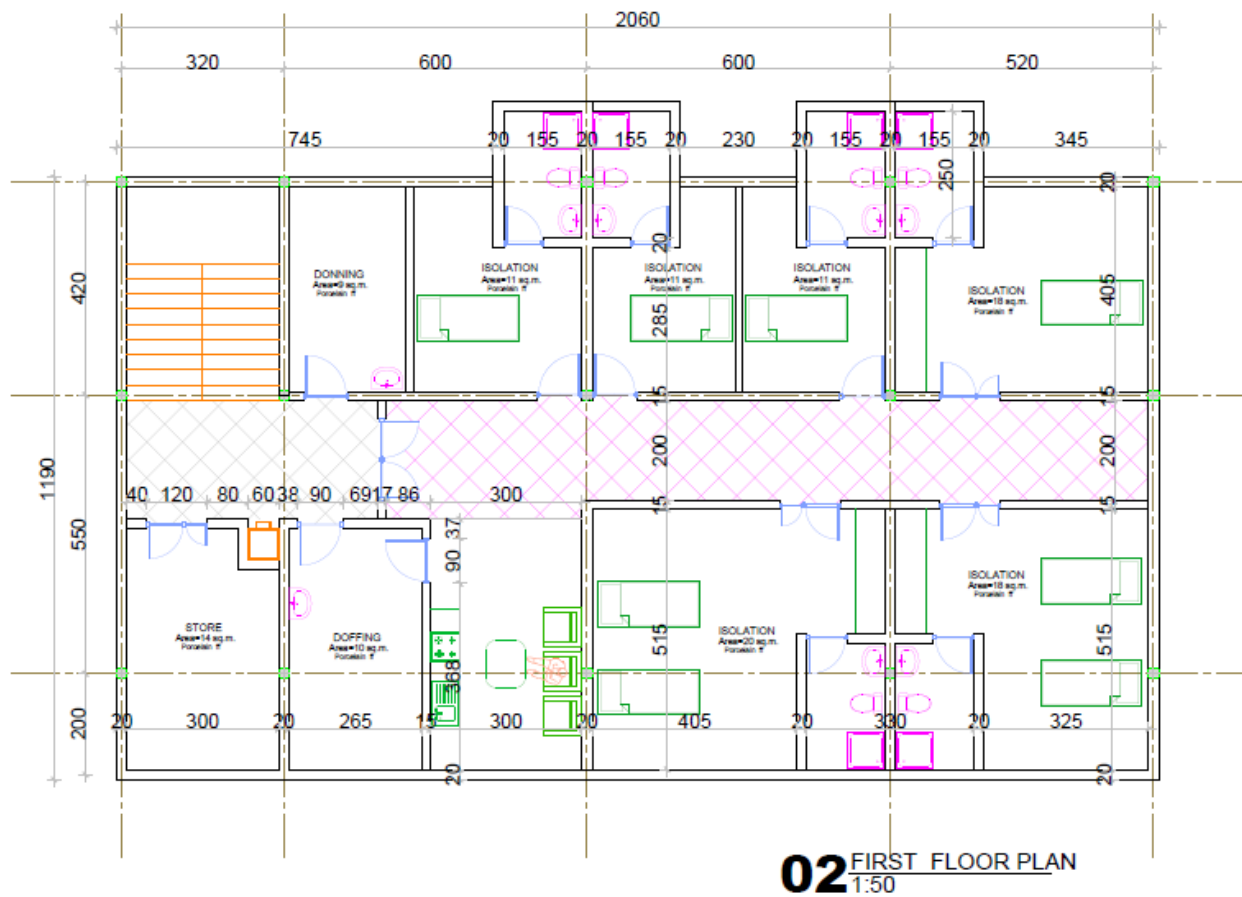


Figure 3: Design Floor Layout of the Isolation Center

The proposed Center is designed to provide safe, efficient management of suspected or confirmed infectious disease cases detected at the airport. It includes:

- Reception and Screening Area - For triage, registration, and initial health assessment.
- Isolation Rooms (Single Occupancy) - Equipped with negative pressure ventilation, handwashing facilities, and attached toilets for suspected or confirmed cases.
- Donning and Doffing Rooms - Separate areas for staff to put on and remove personal protective equipment (PPE) safely.
- Medical Examination and Treatment Room - For clinical evaluation and basic emergency care.
- Sample Collection and Storage Area - For safe handling and temporary storage of laboratory specimens.
- Nursing Station - Central monitoring point for patient observation and coordination.
- Waste Storage and Disposal Area - For segregation and temporary storage of medical and infectious waste.

- Decontamination Area - For disinfection of equipment, surfaces, and reusable materials.
- Staff Rest and Support Area - Includes changing rooms, showers, and a resting space for healthcare workers.
- Utility and Technical Support Rooms - For ventilation systems, power backup, and water supply control.

### **1.6. Land Acquisitions**

The proposed Isolation Center will be constructed entirely within the existing high-security perimeter of the Addis Ababa Bole International Airport (BIA). A total land area of 300 m<sup>2</sup> has been formally allocated for this project by the Ethiopian Airports (as documented in Annex 5). Because the site is situated on land already owned and managed by the Ethiopian Airlines Group, the project does not require the acquisition of private land or the conversion of communal property.

Consequently, the sub-project involves no Involuntary Resettlement and does not result in the physical or economic displacement of people. There are no Project-Affected Persons (PAPs), residential structures, or informal settlers within the designated construction zone. The site is an "encumbrance-free" institutional plot, ensuring that the project aligns with both national legal requirements and World Bank safeguard standards regarding land use and involuntary displacement.

## 2. Environmental and Social Management Plan (ESMP)

The screening report for the sub-project, Construction of the Bole Airport Isolation Center, led to the development of an Environmental and Social Management Plan for each project phase: design, construction, and operation. Various environmental and social impacts associated with the project were assessed, and appropriate mitigation measures were established along with designated responsible parties.

Table 1: Environmental and Social risks mitigation measures and implementation plan

| Potential environmental & Social impacts | Proposed mitigation measures  | Responsible for implementing the mitigation measures | Time Horizon                                 | Indicative Budget for implementation (USD) |
|--|---|--|--|--|
| <b>Pre-construction phase</b>            |   |  |  |  |
| Design fault                             | The design of Bole Airport Isolation Center shall be implemented according to WBG EHS guideline, World Health Organization (WHO), International Health Regulation (IHR), Ethiopian Civil Aviation Authority (ECAA) requirements and Ethiopian Building Code.  | MOH design team                                      | Before construction (NB: Activity Completed) | Budget included in project cost            |
| Emergency Risk                           | Considering the following points in the design of the facility <ul style="list-style-type: none"> <li>- Emergency Exit</li> <li>- Assembly Point</li> <li>- Emergency Alarm</li> <li>- Fire hydrant hose</li> <li>- Smoke detector</li> <li>- Fire sprinkler system</li> </ul> Including a dedicated detached first aid room. | MOH  | During design phase (NB: Activity Completed) | Budget included in project cost            |
| Waste Management Associated risks        | Considering: <ul style="list-style-type: none"> <li>- WASH facilities such as safe water points, bathroom, handwashing stations, hygiene kit distribution, shower facilities.</li> <li>- Solid waste management, and liquid waste management system in the</li> </ul>   | MOH  | During design phase (NB: Activity Completed) | Budget included in project cost            |

| Potential environmental & Social impacts                           | Proposed mitigation measures   | Responsible for implementing the mitigation measures   | Time Horizon                                 | Indicative Budget for implementation (USD) |
|--|--|--|--|--|
|  | design   |  |  |  |
| Earthquake risk  | Considering the current frequent appearance of earthquake in addition to earthquake zone classification of the project location  | MOH  | During design phase (NB: Activity Completed) | Budget included in project cost            |
| Marginalization of people with disability                          | Considering dedicated disabled bathroom and on both floors, standard ramp for access to all blocks   | MOH  | During design phase (NB: Activity Completed) | Budget included in project cost            |
| GBV/SH/SEA risk  | <ul style="list-style-type: none"> <li>- Separate bathroom for male and female</li> <li>- Separate change room for female and male</li> <li>- CCTV installation</li> </ul>   | MOH  | During design phase (NB: Activity Completed) | Budget included in project cost            |
| <b>Construction phase</b>  |  |  |  |  |
| <b>Positive impact</b>   |  |  |  |  |
| Income generation: construction material suppliers and contractors | <ul style="list-style-type: none"> <li>• The project will promote in country procurement where technically or commercially reasonable and feasible.</li> <li>• For earth materials, procure from legitimate sources to avoid encouraging environmental degradation</li> </ul>                                  | Construction contractor                                | During Construction Phase                    | Budget included in project cost            |
| Employment Opportunities   | Labor and professionals will be recruited preferentially from local communities, provided that they have the requisite qualification, competence and desired experience.   | Construction contractor<br><br>Construction supervisor | During Construction Phase                    | Budget included in project cost            |
| <b>Negative impact</b>   |  |  |  |  |
| Impacts on Landscape   | <ul style="list-style-type: none"> <li>• The construction wastes and packaging materials would be regularly collected, transported and properly disposed on a site designated for this purpose to minimize impacts.</li> <li>• Use dust-suppressing water spray during civil works, where necessary</li> </ul> | Construction Contractor                                | Construction Phase                           | Budget included in project cost            |
| Child Labor and Protection   | <ul style="list-style-type: none"> <li>• Provide and implement a child protection strategy</li> </ul>  | Construction   | During Construction                          | Budget included                            |

| Potential environmental & Social impacts                                 | Proposed mitigation measures  | Responsible for implementing the mitigation measures | Time Horizon              | Indicative Budget for implementation (USD) |
|--|---|--|---------------------------|--|
|  | <ul style="list-style-type: none"> <li>Ensuring no children under 18 are employed on site in accordance with national and international labor laws</li> </ul>   | Contractor & supervisor MOH                          | Phase                     | in project cost                            |
| Gender Equity, GBV/SEA/SH  | <ul style="list-style-type: none"> <li>Develop and implement a GBV/SEA/SH, which will include:</li> <li>Gender mainstreaming in employment at the worksite with opportunities provided for females to work, in consonance with local laws and customs</li> <li>Grievances redress mechanisms including non-retaliation.</li> <li>develop and implement an employee code of conduct</li> <li>The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law, and WB where applicable</li> <li>Provide awareness creation training</li> </ul>  | Construction Contractor & supervisor MOH             | During Construction Phase | Budget included in project cost            |
| Air pollution due to emissions from construction machinery and from dust | <ul style="list-style-type: none"> <li>Applying Dust suppression techniques as recommended in WBG EHS guideline</li> <li>Water would be sprayed on access roads and construction sites and loose soil would be compacted and construction machinery would be regularly maintained as recommended by dealers</li> <li>Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring.</li> <li>Ensure good housekeeping and clean construction operations where, among other necessary actions, dust would be quickly swept off cement floors and collected in covered containers.</li> <li>To minimize indoor dust, portable extraction systems are recommended.</li> <li>Avoid water sprays: this could lead to indoor flooding of surrounding rooms</li> </ul> | Construction Contractor                              | During Construction Phase | Budget included in project cost            |

| Potential environmental & Social impacts                                    | Proposed mitigation measures  | Responsible for implementing the mitigation measures   | Time Horizon              | Indicative Budget for implementation (USD) |
|---|---|--|---------------------------|--|
| Noise & vibration disturbances due to movement of heavy plant and equipment | <ul style="list-style-type: none"> <li>• Planning activities in consultation with local sectors/offices</li> <li>• Construction activities during night time would be avoided.</li> <li>• No discretionary use of noisy machinery within 50 m of residential areas and near institutions or use of manual labour in these sections.</li> <li>• Good maintenance and proper operation of construction machinery.</li> <li>• Use of personal protective clothing (PPE) like earmuff</li> </ul>  | Construction Contractor  | During Construction Phase | Budget included in project cost            |
| Dust due to construction activity   | <ul style="list-style-type: none"> <li>• Use of personal protective clothing (PPE) like dust masks on construction crew.</li> <li>• Water spraying / misting on exposed soil, access roads, and stockpiles, especially during dry and windy conditions.</li> <li>• Covering of stockpiles with tarpaulin or similar materials</li> <li>• Ensure covered transport of dusty materials (sand, cement, soil).</li> </ul>   | Construction Contractor  | During Construction Phase | Budget included in project cost            |
| Impact of improper construction waste management                            | <ul style="list-style-type: none"> <li>• The wastes will be properly segregated and separated</li> <li>• The contractor will work together with the Municipal Council to facilitate proper waste handling and disposal from the site.</li> <li>• Waste will be picked off the site every day and temporarily kept on site</li> </ul>  | <ul style="list-style-type: none"> <li>• Construction Contractor</li> <li>• Construction supervisor</li> </ul> | During Construction Phase | 12,000.00                                  |
| Occupational health and Safety Impacts                                      | <ul style="list-style-type: none"> <li>• Orientation would be provided to all construction workers on safe work practices and guidelines and ensure that they adhere to them.</li> <li>• Training on incidences handling and prevention would be provided to workers.</li> <li>• Use of signage to warn staff and/ or visitors that are not involved in construction activities of dangerous places.</li> <li>• Safety supervision of works would be done regularly to ensure that safety conditions are met</li> <li>• Provide appropriate personnel protective equipment (PPE) to all workers.</li> </ul> | <ul style="list-style-type: none"> <li>• Construction Contractor</li> <li>• Construction supervisor</li> </ul> | During Construction Phase | 17,000.00                                  |

| Potential environmental & Social impacts | Proposed mitigation measures   | Responsible for implementing the mitigation measures | Time Horizon | Indicative Budget for implementation (USD) |
|--|--|--|--------------|--|
|  | <p><b>i) Slip, Trip and Falls Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>○ Regularly cleaning the worksite; the worksite shall be neat.</li> <li>○ Ensuring employees receive appropriate training and instructions</li> <li>○ Deal with spills straight away as per the spill response plan</li> <li>○ Consider routine monitoring of areas where spills are a high risk</li> <li>○ Use absorbent material to soak up the spill</li> <li>○ Identify areas at high spill risk and locate absorbent materials nearby</li> <li>○ Where possible avoid using wet cleaning as this may spread the potential danger area</li> <li>○ Consider using spill kits</li> <li>○ Placing readable signs alerting people of hazardous such as for slippery floors,</li> <li>○ Ensure slip-resistant footwear is provided and worn as needed providing personal protective equipment (e.g. slip-resistant footwear) if required</li> </ul> <p><b>ii) Eye hazard Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>○ Always wear personal protective eyewear for workers working on high dust and eye goggles for welders,</li> <li>○ Clean your eyewear several times throughout the day, and always brush yourself off before removing your safety glasses.</li> <li>○ Follow the recommended measures stated in World Bank EHS guideline, 2007</li> </ul> <p><b>iii) Welding / Hot Work</b></p> <ul style="list-style-type: none"> <li>○ Provision of proper eye protection such as welder goggles and/or a full-face eye shield for all personnel involved in, or assisting, welding operations. Additional methods may include the use of welding barrier screens around the specific work station (a solid</li> </ul> |  |              |  |

| Potential environmental & Social impacts | Proposed mitigation measures   | Responsible for implementing the mitigation measures | Time Horizon | Indicative Budget for implementation (USD) |
|--|--|--|--------------|--|
|  | <p>piece of light metal, canvas, or plywood designed to block welding light from others). Devices to extract and remove noxious fumes at the source may also be required.</p> <ul style="list-style-type: none"> <li>○ Special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) shall be implemented if welding or hot cutting is undertaken outside established welding work stations, including ‘Hot Work Permits, stand-by fire extinguishers, stand-by fire watch, and maintaining the fire watch for up to one hour after welding or hot cutting has terminated. Special procedures are required for hot work on tanks or vessels that have contained flammable materials.</li> </ul> <p><b>iv) Ergonomics, Repetitive Motion, Manual Handling</b></p> <ul style="list-style-type: none"> <li>○ Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and requiring multi-person lifts if weights exceed thresholds</li> <li>○ Selecting and designing tools that reduce force requirements and holding times, and improve postures</li> <li>○ Providing user adjustable work stations · Incorporating rest and stretch breaks into work processes, and conducting job rotation · Implementing quality control and maintenance programs that reduce unnecessary forces and exertions · Taking into consideration additional special conditions such as left- handed persons.</li> <li>○ Adjust the height of working surfaces to reduce long reaches and awkward postures,</li> <li>○ Put work supplies and equipment within comfortable reach,</li> <li>○ Provide the right tool handle for the worker,</li> <li>○ Vary tasks for workers (e.g., employ job rotation),</li> </ul> |  |              |  |

| Potential environmental & Social impacts                                   | Proposed mitigation measures   | Responsible for implementing the mitigation measures   | Time Horizon                  | Indicative Budget for implementation (USD) |
|--|--|--|-------------------------------|--|
|  | <ul style="list-style-type: none"> <li>○ Encourage short rest breaks</li> </ul>  |  |                               |  |
| Impact from traffic accidents due to moving machinery                      | <ul style="list-style-type: none"> <li>● Planning &amp; segregating the location of vehicle traffic, machine operation, &amp; walking areas, and controlling vehicle traffic through the use of one-way traffic routes,</li> <li>● Establishment of speed limits, and on-site trained flag people wearing high-visibility vests or outer clothing covering to direct traffic</li> <li>● Adopt best transport safety practices</li> <li>● Provide on-site training to drivers, machine operators, and traffic controller about traffic accident employee safe traffic control measures</li> <li>● Develop vehicle traffic plan to minimize traffic accidents</li> </ul> | <ul style="list-style-type: none"> <li>● Construction Contractor</li> </ul>                            | - D                           | 12,000.00                                  |
| Archaeological Artefacts and Cultural Chance Finds within the Project Site | <ul style="list-style-type: none"> <li>● Implementation of Chance Find Procedure and training of the construction workers</li> <li>● Report chance finds immediately to Addis Ababa City Administration Museum and Monuments Protection Department and MOH PHEILO</li> </ul>   | <ul style="list-style-type: none"> <li>● Contractor and MOH</li> </ul>                                 | Regularly during construction | Included in construction cost              |
| <b>Operation phase</b>   |  |  |                               |  |
| <b>Positive impact</b>   |  |  |                               |  |
| Improved public health emergency preparedness and response services.       | <ul style="list-style-type: none"> <li>● Construction of Bole Airport Isolation center will improve health surveillance at point of entries. It will facilitate the provision of standard service for the suspect.</li> </ul>  | <ul style="list-style-type: none"> <li>● EPHI and MoH</li> </ul>                                       | During Operation Phase        | 12,000.00                                  |
| Generation of additional permanent employment                              | <ul style="list-style-type: none"> <li>● Operation of the Isolation Center will create additional permanent technical and non-technical job opportunities for different professionals, and supportive personnel.</li> </ul>  | <ul style="list-style-type: none"> <li>● EPHI and MoH</li> </ul>                                       | During Operation Phase        | 72,000.00 per annum                        |
| <b>Negative Impact</b>   |  |  |                               |  |
| Occupational health and safety risks on health care                        | <ul style="list-style-type: none"> <li>● Provide personal Protection equipment</li> <li>● Implement engineering control systems like primary and secondary barriers</li> </ul>   | <ul style="list-style-type: none"> <li>● EPHI TBHD</li> <li>● Bole Airport Isolation Center</li> </ul> | During Operation Phase        | 1,000 per annum                            |

| Potential environmental & Social impacts  | Proposed mitigation measures   | Responsible for implementing the mitigation measures  | Time Horizon           | Indicative Budget for implementation (USD) |
|---|--|---|------------------------|--|
| providers & supportive staff              | <ul style="list-style-type: none"> <li>• Provide health and safety training</li> <li>• Adopting and implementing safety manuals aligned with OSH guideline</li> <li>• Develop and implement safety standards.</li> <li>• Implement the facility containment devices, and administrative controls.</li> <li>• Use Personal Protective Equipment during performing activities</li> <li>• Standard Safety signages shall posted</li> <li>• Preparation and implementation of contingency plan for the management of any epidemic/pandemic cases at the isolation center.</li> </ul>   | <ul style="list-style-type: none"> <li>• HSE Officer</li> </ul>   |                        |  |
| Impacts from physical hazards             | <ul style="list-style-type: none"> <li>• Orientation for all staff would be given on safe work practices and guidelines and ensure that they adhere to it.</li> <li>• Training would be conducted on incident handling and prevention. This would involve proper handling of suspect, electricity, waste, and etc.</li> <li>• Provide non-slip flooring, proper drainage, and adequate lighting.</li> <li>• Use safety-engineered sharps and needle-disposal containers.</li> <li>• Prohibit use of damaged or uncertified equipment.</li> </ul>   | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> <li>• HSE Officer</li> </ul> | During Operation Phase | 5,000.00<br>Per annum.                     |
| Impacts from Infectious/biological hazard | <ul style="list-style-type: none"> <li>• All workers to be provided with appropriate PPE against exposure to infectious pathogens in accordance with recognized international safety standards and guidelines.</li> <li>• Provide adequate PPE (gloves, gowns, masks, N95/FFP2 respirators, face shields).</li> <li>• Train staff on correct donning and doffing procedures.</li> <li>• Ensure proper disposal of used PPE as infectious waste.</li> <li>• Use well-ventilated isolation rooms (preferably negative pressure where feasible).</li> <li>• Ensure staff vaccination (as per national guidelines).</li> <li>• Conduct regular health monitoring and post-exposure management.</li> <li>• Maintain incident reporting and exposure follow-up systems.</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul>                        | During Operation phase | 15,000.00                                  |

| Potential environmental & Social impacts   | Proposed mitigation measures  | Responsible for implementing the mitigation measures   | Time Horizon           | Indicative Budget for implementation (USD) |
|--|---|--|------------------------|--|
| Impacts from chemicals hazard  | <ul style="list-style-type: none"> <li>• Only small amounts of chemicals necessary for daily use would be stored in the Isolation Center.</li> <li>• Replacement of the hazardous substance with a less hazardous substitute</li> <li>• Implementation of engineering and administrative control measures to avoid or minimize the level of exposure below internationally established or recognized limits</li> <li>• Eye-wash stations and/or emergency showers would be provided close to all workstations.</li> <li>• Material Safety Data Sheets (MSDS) or equivalent shall be availed onsite.</li> <li>• Training workers in the use of the available information (such as MSDSs), safe work practices, and appropriate use of PPE.</li> <li>• Standard Safety signages shall posted</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul> | During Operation phase | 5,000.00                                   |
| Impact from Electrical and Hazards   | <ul style="list-style-type: none"> <li>• All electrical installations and equipment would be inspected and tested regularly, including earthing/ grounding systems.</li> <li>• Circuit-breakers and earth-fault-interrupters would be installed</li> <li>• All facility electrical equipment would be earthed /grounded, disconnect equipment attached to high-voltage or high- amperage power sources</li> <li>• Standard Safety signages shall posted</li> </ul>  | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul> | During Operation phase | Budget included the construction           |
| Impact of handling of patient, patient sample, infectious materials and samples in/from the isolation center | <ul style="list-style-type: none"> <li>• Use robust and leak-proof sample containers</li> <li>• Personnel would be trained on sample and waste handling, transport and storage.</li> <li>• Use triple packaging during transportation of infectious materials</li> <li>• Prepare and strictly implement IPC standards for the isolation center</li> <li>• Appropriate Package during transportation of infectious materials Shall be followed</li> </ul>  | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul> | During Operation phase | 2,000.00                                   |
| Impact of contamination of   | <ul style="list-style-type: none"> <li>• Workers would be trained on evacuation of the contaminated area</li> </ul>   | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> </ul>  |                        |  |

| Potential environmental & Social impacts  | Proposed mitigation measures  | Responsible for implementing the mitigation measures  | Time Horizon                              | Indicative Budget for implementation (USD) |
|---|---|---|---|--|
| the Isolation Center  | <ul style="list-style-type: none"> <li>Workers would also be trained on decontamination or disinfection,</li> <li>Rinsing, and wiping dry of the spillage area with an absorbent cloth by personnel wearing adequate protective clothing and</li> <li>Decontamination or disinfection of the protective clothing if necessary.</li> <li>Handling and managing of spill and splash</li> <li>Preparation and implementation of contingency plan for the management of any epidemic/pandemic cases at the isolation center.</li> </ul>   | <ul style="list-style-type: none"> <li>Bole Airport Isolation Center</li> </ul>   | During Operation phase                    | 1,000.00                                   |
| Ergonomic Hazards   | <ul style="list-style-type: none"> <li>Training of workers in lifting and materials handling techniques during operation,</li> <li>Planning work site layout to minimize the need for manual transfer of heavy loads</li> <li>Selecting tools and designing work stations that reduce force requirements and holding times</li> <li>Maintaining Shifting workers practice (Staffs the bole point of entry are currently working in three shifts)</li> </ul>   | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center</li> </ul>                                      | During Operation phase                    | 1,000                                      |
| Gender Based Violence, Sexual Harassment/Sexual Exploitation and Abuse (GBV/SEA/SH) | <ul style="list-style-type: none"> <li>Conduct continued sensitization and awareness raising to EPHI staff on prevention of GBV/SEA/SH.</li> <li>Strengthen the Gender and women office of EPHI to address GBV SEA/SH cases when it occurs.</li> <li>Establish proper grievance handling system, according to WB standard</li> <li>Install CCTV camera.</li> <li>Maintain the privacy of suspects</li> <li>Develop and implement SOP for suspect handling according to WBG ESS and EHS guideline, International Health Regulation (IHR), and Ethiopian Civil Aviation Authority (ECAA) requirements</li> <li>Assigning/hiring gender and social inclusion expert</li> </ul> | <ul style="list-style-type: none"> <li>EPHI women and youth office</li> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center</li> </ul> | - During design phase and Operation Phase | 2,500                                      |
| Lack of inclusiveness risk  | <ul style="list-style-type: none"> <li>Assign translators for non-English speaker</li> </ul>  | <ul style="list-style-type: none"> <li>EPHI women and</li> </ul>  | • During Operation                        | 5000                                       |

| Potential environmental & Social impacts       | Proposed mitigation measures  | Responsible for implementing the mitigation measures   | Time Horizon           | Indicative Budget for implementation (USD) |
|--|---|--|------------------------|--|
| (Language, disability, gender)                 | <ul style="list-style-type: none"> <li>• Hire/ assign special need experts</li> <li>• Facilitate movement of disabled within the facilities.</li> <li>• Assigning/hiring gender and social inclusion expert</li> <li>• Develop and implement SOP for suspect handling according to WBG ESS and EHS guideline, International Health Regulation (IHR), and Ethiopian Civil Aviation Authority (ECAA) requirements</li> </ul>  | <ul style="list-style-type: none"> <li>• youth office</li> <li>• EPHI TBHD</li> </ul>                  | Phase                  |  |
| Suspect depression/stress due to isolation     | <ul style="list-style-type: none"> <li>• Facilitating Psychosocial Support</li> <li>• Including in houses puzzles.</li> <li>• Including standard cafeteria</li> <li>• Providing standard room and accommodations for suspects</li> <li>• Establishing proper GRM</li> <li>• Assigning/hiring social work expert</li> </ul>  | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul> |                        | 5000                                       |
| Impact due to Improper liquid waste Management | <ul style="list-style-type: none"> <li>• Liquid infectious wastes would be placed may be placed in containment tanks and disinfected onsite.</li> <li>• Sanitary waste shall be collected in the septic tank and further conveyed to Kality Wastewater treatment plant.</li> </ul>  | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>•</li> </ul>                               | During Operation Phase | 200,000                                    |
| Impact due to Improper solid Waste Management  | <ul style="list-style-type: none"> <li>• Temporary/Satellite paved onsite waste segregation site shall be established in the Isolation center.</li> <li>• Solid waste shall be carefully segregated and transported final disposal/treatment site i.e municipal waste shall be transported to Koshe landfill and infectious solid waste shall be carefully transported to Black lion Specialized Hospital for incineration, weekly.<br/>Develop and implement a waste management plan</li> <li>• Initial packaging and storage would take place where HCW is generated.</li> <li>• Storage of waste will then be moved to a temporary on- site storage location</li> <li>• Non-risk HCW would always be stored in a separate location from the</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> </ul> | During Operation Phase | 200,000                                    |

| Potential environmental & Social impacts | Proposed mitigation measures   | Responsible for implementing the mitigation measures | Time Horizon | Indicative Budget for implementation (USD) |
|--|--|--|--------------|--|
|  | <p>infectious/ hazardous HCW in order to avoid cross-contamination.</p> <ul style="list-style-type: none"> <li>• Strengthen the internal waste management system (collection, storage and disposal) and equip it with additional facilities to allow for segregated collection at source.</li> <li>• All sharps used in the lab would be autoclaved prior to incineration.</li> <li>• Sharps would be placed in rigid, puncture-resistant containers made of glass, metal, rigid plastic, or cardboard.</li> <li>• Solid or semisolid wastes would be placed in tear-resistant plastic bags judged by their thickness or durability.</li> <li>• There would be special packaging characteristics for some treatment techniques: incineration requires combustible containers, and steam sterilization requires packaging materials that allow steam penetration and evacuation of air.</li> <li>• Non-hazardous wastes that are generated by the proposed facility would be incinerated at the nearby hospital.</li> <li>• The facility shall have separate onsite septic tank.</li> <li>• Provide appropriate waste bins (colour coded) for the different types of waste generated to allow segregation and collection at the point of generation.</li> <li>• Staff and all other staff involved in waste handling would be trained on the waste handling treatment, and disposal techniques.</li> <li>• Fumigation of the sewer line would be conducted before sewer line maintenance.</li> <li>• Wastes shall be properly labeled and stored.</li> <li>• Annual waste management audits shall be conducted.</li> <li>• Keeping manifests or other records that document the amount of waste generated and its destination.</li> </ul> |  |              |  |

| Potential environmental & Social impacts         | Proposed mitigation measures   | Responsible for implementing the mitigation measures   | Time Horizon           | Indicative Budget for implementation (USD) |
|--|--|--|------------------------|--|
| Risk associated with off-site transport of waste | <ul style="list-style-type: none"> <li>• Develop and implement waste transportation SOP.</li> <li>• Follow applicable national regulations and internationally accepted standards for packaging, labeling, and transport of hazardous materials and wastes</li> <li>• All waste containers designated for off-site shipment would be secured and labeled with the contents and associated hazards, be properly loaded on the transport vehicles before leaving the site, and be accompanied by a shipping paper (i.e., manifest) that describes the load and its associated hazards</li> <li>• Use tanks and containers specially designed and manufactured to incorporate features appropriate for the wastes they are intended to carry</li> <li>• Properly label all transport tanks and containers to identify the contents, hazards, and actions required in various emergency situations.</li> <li>• The waste would be placed in rigid, leak-proof containers before being loaded.</li> <li>• Containers would be covered with lids during transportation.</li> <li>• When transporting plastic bags of infectious waste, care should be taken to prevent tearing the bags.</li> <li>• Vehicles used for transporting infectious waste would be disinfected prior to use for any other purpose.</li> <li>• The vehicles shall carry adequate supplies of plastic bags, protective clothing, cleaning tools, and disinfectants to clean and disinfect in case of any spills.</li> <li>• Records must be kept documenting all transport of medical waste</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center</li> <li>• Addis Ababa municipal waste management authority</li> </ul> | During Operation Phase | 20,000                                     |
| <b>Total cost</b>                                |  |  | <b>587,500.00</b>      |  |

### **3. Environmental and Social Management Plan Monitoring Plan and Institutional Arrangement**

#### **3.1. Institutional arrangement, roles and responsibilities for ESMP implementation**

Institutional responsibility of implementing this ESMP will rest with the Project Coordination Team, under Public Health Infrastructure Lead Executive Office (PHILEO) at MoH during construction and EPHI Travelers and Borderers health Directorate during operation phase.

During construction, the contractor will be responsible for implementing environmental and social mitigation measures included in the present ESMP report. The construction supervisor and delegated officers from the PHILEO and PIU will monitor the proper implementation of mitigating measures at the right time. The Contractor will be fully responsible for ensuring that all the work will be carried out as per the environmental and social requirements indicated in the design and technical specifications and the present ESMP report.

Once, MOH PHEILO has handover the constructed facility, the Bole Airport Isolation Center will be administered under Ethiopian Public Health. During the operation period, the environmental and social risk management issues will be monitored jointly by EPHI Travelers and Borderers Health Directorate, Ministry of Women and Social Affairs (MoWSA), Ministry of Labor and Skills (MOLS - Ethiopia), and Ethiopian Environmental Protection Agency (EPA) or its counterpart city office, Sub-city, Woreda (such as Woreda 9), and the. The Management of the Project (Bole Airport Isolation Center) may also organize a unit for Environment, Health and Safety to enable implementation and monitoring of the mitigation measures during operational phases.

### 3.2. Environmental and Social Management Plan (ESMP) Monitoring Plan

Table 2: Environmental and Social risks mitigation measures and implementation plan

| Potential environmental & Social impacts  | Proposed mitigation measures  | Means of verification | Responsible Body | Time Horizon                      |
|---|---|-----------------------|------------------|-----------------------------------|
| <b>Pre-construction phase</b>             |   |                       |                  |                                   |
| Design fault                              | The design of Bole Airport Isolation Center shall be implemented according to WBG EHS guideline, World Health Organization (WHO), International Health Regulation (IHR), Ethiopian Civil Aviation Authority (ECAA) requirements and Ethiopian Building Code.  | Project Design Review | Project ESSS     | During project design (Completed) |
| Emergency Risk                            | Considering the following points in the design of the facility <ul style="list-style-type: none"> <li>- Emergency Exit</li> <li>- Assembly Point</li> <li>- Emergency Alarm</li> <li>- Fire hydrant hose</li> <li>- Smoke detector</li> <li>- Fire sprinkler system</li> </ul> Including a dedicated detached first aid room. | Project Design Review | Project ESSS     | During project design (Completed) |
| Waste Management Associated risks         | Considering: <ul style="list-style-type: none"> <li>- WASH facilities such as safe water points, bathroom, handwashing stations, hygiene kit distribution, shower facilities.</li> <li>- Solid waste management, and liquid waste management system in the design</li> </ul>  | Project Design Review | Project ESSS     | During project design (Completed) |
| Earthquake risk                           | Considering the current frequent appearance of earthquake in addition to earthquake zone classification of the project location   | Project Design Review | Project ESSS     | During project design (Completed) |
| Marginalization of people with disability | Considering dedicated disabled bathroom and on both floors, standard ramp for access to all blocks  | Project Design Review | Project ESSS     | During project design (Completed) |
| GBV/SH/SEA risk                           | <ul style="list-style-type: none"> <li>- Separate bathroom for male and female</li> <li>- Separate change room for female and male</li> <li>- CCTV installation</li> </ul>  | Project Design Review | Project ESSS     | During project design (Completed) |
| <b>Construction phase</b>                 |   |                       |                  |                                   |
| <b>Positive impact</b>                    |   |                       |                  |                                   |

| Potential environmental & Social impacts                                 | Proposed mitigation measures  | Means of verification   | Responsible Body   | Time Horizon       |
|--|---|---|--------------------|--------------------|
| Income generation:<br>Construction material suppliers and contractors    | <ul style="list-style-type: none"> <li>The project will promote in country procurement where technically or commercially reasonable and feasible.</li> <li>For earth materials, procure from legitimate sources to avoid encouraging environmental degradation</li> </ul>   | Percentage of construction material sourced locally   | MOH                | Every Six month    |
| Employment Opportunities   | Labor and professionals will be recruited preferentially from local communities, provided that they have the requisite qualification, competence and desired experience.  | Number of local experts and labors engaged  | MOH                | Every Six months   |
| <b>Negative impact</b>   |   |   |                    |                    |
| Impacts on Landscape   | <ul style="list-style-type: none"> <li>The construction wastes and packaging materials would be regularly collected, transported and properly disposed on a site designated.</li> <li>Use dust-suppressing water spray during civil works, where necessary</li> </ul>   | Site visit; non-dusty construction site   | MOH ESS Specialist | Every three months |
| Child Labour and Protection  | <ul style="list-style-type: none"> <li>Provide and implement a child protection strategy</li> <li>Ensuring no children under 18 are employed on site in accordance with national and international labour laws</li> </ul>   | Contract agreement review and site visit  | MOH ESS Specialist | Every three months |
| Gender Equity, GBV/SEA/SH  | <ul style="list-style-type: none"> <li>Gender mainstreaming in employment at the worksite with opportunities provided for females to work, in consonance with local laws and customs</li> <li>Grievances redress mechanisms including non-retaliation.</li> <li>Develop and implement an employee code of conduct</li> <li>The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law, and WB where applicable</li> <li>Provide awareness creation training</li> </ul> | Checking GBV responsive GRM presence.<br>Checking Code of conduct signed.<br>Checking training/orientation attendance on the issue. | MOH ESS Specialist | Every three months |
| Air pollution due to emissions from construction machinery and from dust | <ul style="list-style-type: none"> <li>Applying Dust suppression techniques as recommended in WBG EHS guideline</li> <li>Water would be sprayed on access roads and construction sites and loose soil would be compacted and construction machinery would be regularly maintained as recommended by dealers</li> </ul>  | Site visit  | MOH ESS Specialist | Every three months |

| Potential environmental & Social impacts                                    | Proposed mitigation measures  | Means of verification                           | Responsible Body | Time Horizon |
|---|---|---|------------------|--------------|
|   | <ul style="list-style-type: none"> <li>Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring.</li> <li>Ensure good housekeeping and clean construction operations where, among other necessary actions, dust would be quickly swept off cement floors and collected in covered containers.</li> <li>To minimize indoor dust, portable extraction systems are recommended.</li> <li>Avoid water sprays: this could lead to indoor flooding of surrounding rooms</li> </ul> |   |                  |              |
| Noise & vibration disturbances due to movement of heavy plant and equipment | <ul style="list-style-type: none"> <li>Planning activities in consultation with local sectors/offices</li> <li>Construction activities during night time would be avoided.</li> <li>No discretionary use of noisy machinery within 50 m of residential areas and near institutions or use of manual labour in these sections.</li> <li>Good maintenance and proper operation of construction machinery.</li> <li>Use of personal protective clothing (PPE) like earmuff</li> </ul>  | Site supervision,<br>Noise pollution monitoring | MOH ESSS         | Every month  |
| Dust due to construction activity   | <ul style="list-style-type: none"> <li>Use of personal protective clothing (PPE) like dust masks on construction crew.</li> <li>Water spraying / misting on exposed soil, access roads, and stockpiles, especially during dry and windy conditions.</li> <li>Covering of stockpiles with tarpaulin or similar materials</li> <li>Ensure covered transport of dusty materials (sand, cement, soil).</li> </ul>   | Site supervision,                               | MOH ESSS         | Every month  |
| Impact of improper construction waste management                            | <ul style="list-style-type: none"> <li>The wastes will be properly segregated and separated</li> <li>The contractor will work together with the Municipal Council to facilitate proper waste handling and disposal from the site.</li> <li>Waste will be picked off the site every day and temporarily kept on site</li> </ul>  | Site supervision,                               | MOH ESSS         | Every month  |
| Occupational health and Safety Impacts                                      | <ul style="list-style-type: none"> <li>Orientation would be provided to all construction workers on safe work practices and guidelines and ensure that they adhere to them.</li> </ul>  | Site supervision                                | MOH ESSS         | Every month  |

| Potential environmental & Social impacts | Proposed mitigation measures  | Means of verification | Responsible Body | Time Horizon |
|--|---|-----------------------|------------------|--------------|
|  | <ul style="list-style-type: none"> <li>• Training on incidences handling and prevention would be provided to workers.</li> <li>• Use of signage to warn staff and/ or visitors that are not involved in construction activities of dangerous places.</li> <li>• Safety supervision of works would be done regularly to ensure that safety conditions are met</li> <li>• Provide appropriate personnel protective equipment (PPE) to all workers.</li> </ul> <p><b>v) Slip, Trip and Falls Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>○ Regularly cleaning the worksite; the worksite shall be neat.</li> <li>○ Ensuring employees receive appropriate training and instructions</li> <li>○ Deal with spills straight away as per the spill response plan</li> <li>○ Consider routine monitoring of areas where spills are a high risk</li> <li>○ Use absorbent material to soak up the spill</li> <li>○ Identify areas at high spill risk and locate absorbent materials nearby</li> <li>○ Where possible avoid using wet cleaning as this may spread the potential danger area</li> <li>○ Consider using spill kits</li> <li>○ Placing readable signs alerting people of hazardous such as for slippery floors,</li> <li>○ Ensure slip-resistant footwear is provided and worn as needed providing personal protective equipment (e.g. slip-resistant footwear) if required</li> </ul> <p><b>vi) Eye hazard Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>○ Always wear personal protective eyewear for workers working on high dust and eye goggles for welders,</li> <li>○ Clean your eyewear several times throughout the day, and always brush yourself off before removing your safety glasses.</li> </ul> |                       |                  |              |

| Potential environmental & Social impacts | Proposed mitigation measures  | Means of verification | Responsible Body | Time Horizon |
|--|---|-----------------------|------------------|--------------|
|  | <ul style="list-style-type: none"> <li>○ Follow the recommended measures stated in World Bank EHS guideline, 2007</li> <li><b>vii) Welding / Hot Work</b></li> <li>○ Provision of proper eye protection such as welder goggles and/or a full-face eye shield for all personnel involved in, or assisting, welding operations. Additional methods may include the use of welding barrier screens around the specific work station (a solid piece of light metal, canvas, or plywood designed to block welding light from others). Devices to extract and remove noxious fumes at the source may also be required.</li> <li>○ Special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) shall be implemented if welding or hot cutting is undertaken outside established welding work stations, including ‘Hot Work Permits, stand-by fire extinguishers, stand-by fire watch, and maintaining the fire watch for up to one hour after welding or hot cutting has terminated. Special procedures are required for hot work on tanks or vessels that have contained flammable materials.</li> <li><b>viii) Ergonomics, Repetitive Motion, Manual Handling</b></li> <li>○ Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and requiring multi-person lifts if weights exceed thresholds</li> <li>○ Selecting and designing tools that reduce force requirements and holding times, and improve postures</li> <li>○ Providing user adjustable work stations · Incorporating rest and stretch breaks into work processes, and conducting job rotation · Implementing quality control and maintenance programs that reduce unnecessary forces and exertions · Taking into consideration additional special conditions such as left- handed persons.</li> <li>○ Adjust the height of working surfaces to reduce long reaches and awkward postures,</li> </ul> |                       |                  |              |

| Potential environmental & Social impacts                                   | Proposed mitigation measures   | Means of verification   | Responsible Body | Time Horizon                   |
|--|--|---|------------------|--------------------------------|
|  | <ul style="list-style-type: none"> <li>○ Put work supplies and equipment within comfortable reach,</li> <li>○ Provide the right tool handle for the worker,</li> <li>○ Vary tasks for workers (e.g., employ job rotation),</li> <li>○ Encourage short rest breaks</li> </ul>   |   |                  |                                |
| Impact from traffic accidents due to moving machinery                      | <ul style="list-style-type: none"> <li>● Planning &amp; segregating the location of vehicle traffic, machine operation, &amp; walking areas, and controlling vehicle traffic through the use of one-way traffic routes,</li> <li>● Establishment of speed limits, and on-site trained flag people wearing high-visibility vests or outer clothing covering to direct traffic</li> <li>● Adopt best transport safety practices</li> <li>● Provide on-site training to drivers, machine operators, and traffic controller about traffic accident employee safe traffic control measures</li> <li>● Develop vehicle traffic plan to minimize traffic accidents</li> </ul> | Site supervision.   | - MOH ESSS       | Every month                    |
| Archaeological Artefacts and Cultural Chance Finds within the Project Site | <ul style="list-style-type: none"> <li>● Implementation of Chance Find Procedure and training of the construction workers</li> <li>● Report chance finds immediately to Addis Ababa City Administration Museum and Monuments Protection Department and MOH PHEILO</li> </ul>   | Site supervision  | MOH ESSS         | During Excavation (Every week) |
| <b>Operation phase</b>   |  |   |                  |                                |
| <b>Positive impact</b>   |  |   |                  |                                |
| Improved public health emergency preparedness and response services.       | <ul style="list-style-type: none"> <li>● Construction of Bole Airport Isolation center will improve health surveillance at point of entries. It will facilitate the provision of standard service for the suspect.</li> </ul>  | <ul style="list-style-type: none"> <li>● Regular Stakeholder consultation</li> </ul>          | EPHI and MoH     | Every three months             |
| Generation of additional permanent employment                              | <ul style="list-style-type: none"> <li>● Operation of the Isolation Center will create additional permanent technical and non-technical job opportunities for different professionals, and supportive personnel.</li> </ul>  | <ul style="list-style-type: none"> <li>● Number of personnel hired at the facility</li> </ul> | EPHI and MoH     | Every three months             |
| <b>Negative Impact</b>   |  |   |                  |                                |
|  | <ul style="list-style-type: none"> <li>● Provide personal Protection equipment</li> </ul>  | <ul style="list-style-type: none"> <li>● Report review</li> </ul>                             |                  |                                |

| Potential environmental & Social impacts   | Proposed mitigation measures  | Means of verification   | Responsible Body   | Time Horizon       |
|--|---|---|--|--------------------|
| Occupational health and safety risks on health care providers & supportive staff | <ul style="list-style-type: none"> <li>• Implement engineering control systems like primary and secondary barriers</li> <li>• Provide health and safety training</li> <li>• Adopting and implementing safety manuals aligned with OSH guideline</li> <li>• Develop and implement safety standards.</li> <li>• Implement the facility containment devices, and administrative controls.</li> <li>• Use Personal Protective Equipment during performing activities</li> <li>• Standard Safety signages shall posted</li> <li>• Preparation and implementation of contingency plan for the management of any epidemic/pandemic cases at the isolation center.</li> </ul> | <ul style="list-style-type: none"> <li>• Document review</li> <li>• Interview</li> </ul>                          | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |
| Impacts from physical hazards  | <ul style="list-style-type: none"> <li>• Orientation for all staff would be given on safe work practices and guidelines and ensure that they adhere to it.</li> <li>• Training would be conducted on incident handling and prevention. This would involve proper handling of suspect, electricity, waste, and etc.</li> <li>• Provide non-slip flooring, proper drainage, and adequate lighting.</li> <li>• Use safety-engineered sharps and needle-disposal containers.</li> <li>• Prohibit use of damaged or uncertified equipment.</li> </ul>  | <ul style="list-style-type: none"> <li>• Report review</li> <li>• Document review</li> <li>• Interview</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |
| Impacts from Infectious/biological hazard  | <ul style="list-style-type: none"> <li>• All workers to be provided with appropriate PPE against exposure to infectious pathogens in accordance with recognized international safety standards and guidelines.</li> <li>• Provide adequate PPE (gloves, gowns, masks, N95/FFP2 respirators, face shields).</li> <li>• Train staff on correct donning and doffing procedures.</li> <li>• Ensure proper disposal of used PPE as infectious waste.</li> <li>• Use well-ventilated isolation rooms (preferably negative pressure where feasible).</li> <li>• Ensure staff vaccination (as per national guidelines).</li> </ul>  | <ul style="list-style-type: none"> <li>• Report review</li> <li>• Document review</li> <li>• Interview</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> <li>• Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |

| Potential environmental & Social impacts   | Proposed mitigation measures  | Means of verification   | Responsible Body   | Time Horizon       |
|--|---|---|--|--------------------|
|  | <ul style="list-style-type: none"> <li>Conduct regular health monitoring and post-exposure management.</li> <li>Maintain incident reporting and exposure follow-up systems.</li> </ul>  |   |  |                    |
| Impacts from chemicals hazard  | <ul style="list-style-type: none"> <li>Only small amounts of chemicals necessary for daily use would be stored in the Isolation Center.</li> <li>Replacement of the hazardous substance with a less hazardous substitute</li> <li>Implementation of engineering and administrative control measures to avoid or minimize the level of exposure below internationally established or recognized limits</li> <li>Eye-wash stations and/or emergency showers would be provided close to all workstations.</li> <li>Material Safety Data Sheets (MSDS) or equivalent shall be availed onsite.</li> <li>Training workers in the use of the available information (such as MSDSs), safe work practices, and appropriate use of PPE.</li> <li>Standard Safety signages shall posted</li> </ul> | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Site supervision</li> </ul> | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |
| Impact from Electrical and Hazards   | <ul style="list-style-type: none"> <li>All electrical installations and equipment would be inspected and tested regularly, including earthing/ grounding systems.</li> <li>Circuit-breakers and earth-fault-interrupters would be installed</li> <li>All facility electrical equipment would be earthed /grounded, disconnect equipment attached to high-voltage or high- amperage power sources</li> <li>Standard Safety signages shall posted</li> </ul>  | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Site supervision</li> </ul> | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |
| Impact of handling of patient, patient sample, infectious materials and samples in/from the isolation center | <ul style="list-style-type: none"> <li>Use robust and leak-proof sample containers</li> <li>Personnel would be trained on sample and waste handling, transport and storage.</li> <li>Use triple packaging during transportation of infectious materials</li> <li>Prepare and strictly implement IPC standards for the isolation center</li> <li>Appropriate Package during transportation of infectious materials Shall be followed</li> </ul>  | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Site supervision</li> </ul> | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |

| Potential environmental & Social impacts  | Proposed mitigation measures  | Means of verification   | Responsible Body   | Time Horizon       |
|---|---|---|--|--------------------|
| Impact of contamination of the Isolation Center                                     | <ul style="list-style-type: none"> <li>Workers would be trained on evacuation of the contaminated area</li> <li>Workers would also be trained on decontamination or disinfection,</li> <li>Rinsing, and wiping dry of the spillage area with an absorbent cloth by personnel wearing adequate protective clothing and</li> <li>Decontamination or disinfection of the protective clothing if necessary.</li> <li>Handling and managing of spill and splash</li> <li>Preparation and implementation of contingency plan for the management of any epidemic/pandemic cases at the isolation center.</li> </ul>                | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Site supervision</li> </ul>   | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every three months |
| Ergonomic Hazards   | <ul style="list-style-type: none"> <li>Training of workers in lifting and materials handling techniques during operation,</li> <li>Planning work site layout to minimize the need for manual transfer of heavy loads</li> <li>Selecting tools and designing work stations that reduce force requirements and holding times</li> <li>Maintaining Shifting workers practice (Staffs the bole point of entry are currently working in three shifts)</li> </ul>   | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Site supervision</li> </ul>   | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every six months   |
| Gender Based Violence, Sexual Harassment/Sexual Exploitation and Abuse (GBV/SEA/SH) | <ul style="list-style-type: none"> <li>Conduct continued sensitization and awareness raising to EPHI staff on prevention of GBV/SEA/SH.</li> <li>Strengthen the Gender and women office of EPHI to address GBVSEA/SH cases when it occurs.</li> <li>Establish proper grievance handling system, according to WB standard</li> <li>Install CCTV camera.</li> <li>Maintain the privacy of suspects</li> <li>According to WBG ESS and EHS guideline, International Health Regulation (IHR), and Ethiopian Civil Aviation Authority (ECAA) requirements</li> <li>Assigning/hiring gender and social inclusion expert</li> </ul> | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>GBV responsive GRM presence</li> <li>Grievance mechanism posted in each isolation room</li> </ul> | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every six months   |
| Lack of inclusiveness risk  | <ul style="list-style-type: none"> <li>Assign translators for non-English speaker</li> </ul>  | <ul style="list-style-type: none"> <li>Report review</li> </ul>   |  | Every six months   |

| Potential environmental & Social impacts       | Proposed mitigation measures  | Means of verification  | Responsible Body   | Time Horizon     |
|--|---|--|--|------------------|
| (Language, disability, gender)                 | <ul style="list-style-type: none"> <li>Hire/ assign special need experts</li> <li>Facilitate movement of disabled within the facilities.</li> <li>Assigning/hiring gender and social inclusion expert</li> <li>According to WBG ESS and EHS guideline, International Health Regulation (IHR), and Ethiopian Civil Aviation Authority (ECAA) requirements</li> </ul>   | <ul style="list-style-type: none"> <li>Document review</li> <li>Interview</li> <li>Checking the availability of special need expert and gender balanced staff</li> </ul>       | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> |                  |
| Suspect depression/stress due to isolation     | <ul style="list-style-type: none"> <li>Facilitating Psychosocial Support</li> <li>Including in houses puzzles.</li> <li>Including standard cafeteria</li> <li>Providing standard room and accommodations for suspects</li> <li>Establishing proper GRM</li> <li>Assigning/hiring social work expert</li> </ul>  | <ul style="list-style-type: none"> <li>Report review</li> <li>Document review</li> <li>Interview</li> <li>Checking the availability of psychosocial support linkage</li> </ul> | <ul style="list-style-type: none"> <li>EPHI TBHD</li> <li>Bole Airport Isolation Center HSE Officer</li> </ul> | Every six months |
| Impact due to Improper liquid waste Management | <ul style="list-style-type: none"> <li>Liquid infectious wastes would be placed may be placed in containment tanks and disinfected onsite.</li> <li>Sanitary waste shall be collected in the septic tank and further conveyed to Kality Wastewater treatment plant.</li> </ul>  | <ul style="list-style-type: none"> <li>Site supervision</li> <li>Stakeholder consultation</li> </ul>   | <ul style="list-style-type: none"> <li>EPHI TBHD</li> </ul>  | Every six months |
| Impact due to Improper solid Waste Management  | <ul style="list-style-type: none"> <li>Temporary/Satellite paved onsite waste segregation site shall be established in the Isolation center.</li> <li>Solid waste shall be carefully segregated and transported final disposal/treatment site i.e municipal waste shall be transported to Koshe landfill and infectious solid waste shall be carefully transported to Black lion Specialized Hospital for incineration, weekly.</li> <li>Develop and implement a waste management plan</li> <li>Initial packaging and storage would take place where HCW is generated.</li> <li>Storage of waste will then be moved to a temporary on- site storage location</li> <li>Non-risk HCW would always be stored in a separate location from the infectious/ hazardous HCW in order to avoid cross-</li> </ul> | <ul style="list-style-type: none"> <li>Site supervision</li> <li>Stakeholder consultation</li> </ul>   | <ul style="list-style-type: none"> <li>EPHI TBHD</li> </ul>  | Every six months |

| Potential environmental & Social impacts         | Proposed mitigation measures   | Means of verification  | Responsible Body  | Time Horizon       |
|--|--|--|---|--------------------|
|  | <p>contamination.</p> <ul style="list-style-type: none"> <li>• Strengthen the internal waste management system (collection, storage and disposal) and equip it with additional facilities to allow for segregated collection at source.</li> <li>• All sharps used in the lab would be autoclaved prior to incineration.</li> <li>• Sharps would be placed in rigid, puncture-resistant containers made of glass, metal, rigid plastic, or cardboard.</li> <li>• Solid or semisolid wastes would be placed in tear-resistant plastic bags judged by their thickness or durability.</li> <li>• There would be special packaging characteristics for some treatment techniques: incineration requires combustible containers, and steam sterilization requires packaging materials that allow steam penetration and evacuation of air.</li> <li>• Non-hazardous wastes that are generated by the proposed facility would be incinerated at the nearby hospital.</li> <li>• The facility shall have separate onsite septic tank.</li> <li>• Provide appropriate waste bins (colour coded) for the different types of waste generated to allow segregation and collection at the point of generation.</li> <li>• Staff and all other staff involved in waste handling would be trained on the waste handling treatment, and disposal techniques.</li> <li>• Fumigation of the sewer line would be conducted before sewer line maintenance.</li> <li>• Wastes shall be properly labeled and stored.</li> <li>• Annual waste management audits shall be conducted.</li> <li>• Keeping manifests or other records that document the amount of waste generated and its destination.</li> </ul> |  |   |                    |
| Risk associated with off-site transport of waste | <ul style="list-style-type: none"> <li>• Develop and implement waste transportation SOP.</li> <li>• Follow applicable national regulations and internationally accepted standards for packaging, labeling, and transport of hazardous</li> </ul>   | <ul style="list-style-type: none"> <li>• Site supervision</li> <li>• Stakeholder consultation</li> </ul> | <ul style="list-style-type: none"> <li>• EPHI TBHD</li> </ul> | Every three months |

| Potential environmental & Social impacts | Proposed mitigation measures  | Means of verification   | Responsible Body | Time Horizon |
|--|---|---|------------------|--------------|
|  | <p>materials and wastes</p> <ul style="list-style-type: none"> <li>• All waste containers designated for off-site shipment would be secured and labeled with the contents and associated hazards, be properly loaded on the transport vehicles before leaving the site, and be accompanied by a shipping paper (i.e., manifest) that describes the load and its associated hazards</li> <li>• Use tanks and containers specially designed and manufactured to incorporate features appropriate for the wastes they are intended to carry</li> <li>• Properly label all transport tanks and containers to identify the contents, hazards, and actions required in various emergency situations.</li> <li>• The waste would be placed in rigid, leak-proof containers before being loaded.</li> <li>• Containers would be covered with lids during transportation.</li> <li>• When transporting plastic bags of infectious waste, care should be taken to prevent tearing the bags.</li> <li>• Vehicles used for transporting infectious waste would be disinfected prior to use for any other purpose.</li> <li>• The vehicles shall carry adequate supplies of plastic bags, protective clothing, cleaning tools, and disinfectants to clean and disinfect in case of any spills.</li> <li>• Records must be kept documenting all transport of medical waste</li> </ul> | <ul style="list-style-type: none"> <li>• Report review</li> <li>• Supportive document review</li> </ul> |                  |              |

#### 4. Trainings and Capacity Building Plan

Table 3: Identified Trainings for Bole Airport Isolation Center ESMP Implementation

| Capacity Needs  | Target Participant  | Number of participants | Estimated Cost (USD)                                       |
|---|---|------------------------|--|
| Training on OSHA and waste management; including hot work procedure, work at height procedure, electrical safety) | <ul style="list-style-type: none"> <li>Construction Workers</li> </ul>  | 25                     | 150,000.00   |
| Training on GBV Prevention and Response   | <ul style="list-style-type: none"> <li>Construction Workers</li> <li>Isolation Center Staff</li> </ul>  | 25                     | 150,000.00<br>(50k for const and 100k for Isolation staff) |
| Training on emergency preparedness and response   | <ul style="list-style-type: none"> <li>Occupational health and safety officer</li> <li>Security department</li> <li>Overall Staff</li> </ul>  | 20                     | 300,000.00   |
| Training on Infection Prevention and control, and waste management  | <ul style="list-style-type: none"> <li>Professionals working in Bole Airport Isolation Center</li> <li>Cleaners, waste transporters and handlers, liquid waste treatment facility operators and other staff of the Bole Airport Isolation Center</li> </ul> | 15                     | 300,000.00   |
| Training on travelers handling and Ethiopian Aviation Authority Standards   | <ul style="list-style-type: none"> <li>Occupational health and safety officer</li> <li>Security department</li> <li>Gender Expert</li> <li>Overall Staff</li> </ul>   | 15                     | 300,000.00   |
| <b>Total</b>  |   |                        | <b>1,200,000.00</b>  |

#### 5. Grievance Redress Mechanism

A clear and accessible Grievance Redress Mechanism (GRM) will be established to receive and facilitate the resolution of concerns and grievances from concerned groups including travelers, suspected, BIA workers, EPHI Staff and contractors' workers. The GRM aims to address issues promptly and transparently, fostering good relations between the project and its stakeholders.

##### Principles of the GRM:

- **Accessibility:** Easy for PAPs to access without cost or fear of retribution.
- **Transparency:** Clear process known to all stakeholders.
- **Responsiveness:** Timely acknowledgment and resolution of grievances.
- **Fairness:** Impartial and objective consideration of all grievances.

- **Confidentiality:** Protection of the identity of complainants, especially in sensitive cases like GBV/SEA.
- **Empowerment:** Allowing complainants to feel heard and participate in the resolution process.

## **GRM Structure and Process:**

### **Step 1: Receipt of Grievance**

- Grievances can be submitted through various channels:
  - **In-person:** To the EPHI ESMP Focal Point, Site Engineer (during construction), or EPHI Focal Point found at Isolation Center (during operation).
  - **Written:** Via suggestion boxes at Isolation Center reception, dedicated email address, or formal letter.
  - **Phone:** To a designated project phone number (managed by ESMP Focal Point).
  - **Community Representatives:** Via BIA staff who interact with the airport community.
- All grievances will be logged in a **Grievance Register** immediately upon receipt. The register will include:
  - Date of receipt.
  - Name and contact details of the complainant (if provided, with consent for contact).
  - Nature of the grievance.
  - Date of acknowledgement.

### **Step 2: Acknowledgment and Initial Assessment**

- The EPHI ESMP Focal Point will acknowledge receipt of the grievance within **3 working days**.
- The ESMP Focal Point will conduct an initial assessment to determine the nature and urgency of the grievance.
- For sensitive grievances (e.g., GBV/SEA), immediate referral to appropriate support services (e.g., counseling, medical care) will be prioritized, and a survivor-centered approach ensuring confidentiality will be adopted. A separate, confidential protocol for GBV/SEA grievances will be in place.

### **Step 3: Investigation and Action**

- The EPHI ESMP Focal Point and the contractor (during construction), will investigate the grievance.

- This may involve site visits, interviews with relevant parties, and review of documentation.
- A proposed resolution or action plan will be developed within **10 working days** of the initial assessment.

#### **Step 4: Resolution and Communication**

- The proposed resolution will be communicated to the complainant.
- If the complainant agrees, the resolution will be implemented.
- The resolution and its implementation will be documented in the Grievance Register.
- The grievance will be considered closed upon satisfactory resolution.

#### **Step 5: Appeal and Escalation**

- If the complainant is not satisfied with the proposed resolution or the outcome, they can appeal to a higher authority within EPHI (e.g., EPHI Director General or a designated grievance committee) within **5 working days** of receiving the initial resolution.
- The higher authority will review the case and communicate a final decision within **15 working days**.
- If the complainant remains unsatisfied, they can pursue external legal or administrative remedies as per national laws (e.g., relevant courts). This external option will be communicated to them.

#### **Specific Considerations for GBV/SEA Grievances:**

- A separate, confidential, and survivor-centered GBV/SEA protocol will be in place.
- GBV/SEA grievances will be handled by specifically trained personnel (preferably female) outside the general GRM if the complainant prefers.
- Emphasis will be on providing immediate support to the survivor (medical, psychological, legal) and ensuring their safety and confidentiality, rather than immediate investigation for disciplinary action (which can follow only with informed consent of the survivor and if it does not put them at further risk).
- The GRM will clearly link to external specialized GBV/SEA support services.

#### **Monitoring and Reporting:**

- The ESMP Focal Point will maintain the Grievance Register and prepare monthly summaries of grievances received, status, and resolution.
- These summaries will be submitted to EPHI Management and Ministry of Health, and incorporated into the overall ESMP monitoring reports.
- An annual review of the GRM effectiveness will be conducted.

**Publicity:**

- Information about the GRM, including contact details and procedures, will be widely disseminated through posters at the construction site, at Isolation center, EPHI notice boards, and during community meetings.
- The project will ensure that the GRM is easily understandable, including for non-literate individuals.

**6. Monitoring the implementation of ESMP**

Monitoring is a continuous process to ensure that environmental and social management measures are effectively implemented and achieve their intended outcomes. It involves tracking progress, identifying deviations, and informing adaptive management.

**6.1. Internal Monitoring**

Internal monitoring will be conducted by EPHI's ESMP Focal Point, Site Engineer (during construction), Isolation Center Managers (during operation), and relevant departmental heads.

- **Daily/Weekly Checks:**
  - **Construction Phase:** Visual checks for dust suppression, waste segregation, proper storage of materials, worker PPE usage, safety signage, site cleanliness, and traffic flow.
  - **Operation Phase:** Visual checks for OHS, waste segregation in the center, cleanliness of center, functionality of basic equipment, and adherence to access control.
- **Monthly Reviews:**
  - Review of waste generation and disposal records.
  - Review of OHS incident reports and accident statistics.
  - Review of grievance log and resolution status.
  - Verification of maintenance records for equipment (e.g., vehicles, HVAC, fume hoods).
  - Check for availability and condition of PPE, first-aid kits, and spill kits.
- **Quarterly Reviews:**
  - site inspections by the EPHIA ESMP Focal Point and relevant technical staff.
  - Review of environmental monitoring data (e.g., wastewater quality, air quality if measured).

- Assessment of overall ESMP compliance and effectiveness.
- Identification of emerging issues and formulation of corrective actions.

## 6.2. External Monitoring/Auditing

While the user did not explicitly mention specific external requirements, for projects supported by international funders like the World Bank, independent external monitoring or audits are often required. Even without such a direct requirement, engaging external experts can enhance credibility and identify gaps.

- **Third-Party Environmental and Social Audits:** Periodically (e.g., annually or bi-annually), an independent environmental and social consultant could be engaged to:
  - Review the ESMP implementation status.
  - Verify the accuracy of internal monitoring data.
  - Assess the effectiveness of mitigation measures.
  - Identify areas for improvement and recommend corrective actions.
  - Prepare an independent audit report.
- **Regulatory Inspections:** The Addis Ababa Environmental Protection Authority (AAEPA) will conduct its own inspections to ensure compliance with environmental permits and regulations. These inspections may be scheduled or unannounced.

## 6.3. Monitoring Parameters and Indicators

The monitoring parameters and indicators are detailed in Tables ---- (Environmental and Social Management Plan Matrix and Monitoring Plan Matrix). Key indicators include:

- **Quantitative Indicators:** Volume of waste generated/disposed, water/energy consumption, air pollutant concentrations, noise levels, number of OHS incidents, number of grievances.
- **Qualitative Indicators:** Effectiveness of waste segregation, proper PPE usage, community satisfaction, adherence to animal welfare standards, implementation of biosafety protocols.

## 6.4. Reporting

- **Internal Reports:**
  - **Weekly Reports:** By Site Engineer (construction) and Facility Managers (operation) to the EPHI ESMP Focal Point.

- **Monthly Reports:** By the EPHI ESMP Focal Point to EPHI Management, summarizing monitoring findings, issues, and corrective actions.
- **Quarterly Reports:** Comprehensive reports from the EPHI ESMP Focal Point to AHRI Management then to Ministry of Health, including data analysis, trend assessment, and recommendations.
- **External Reports:**
  - **Annual ESMP Performance Reports:** Prepared by EPHI and submitted to AAEPa and potentially the MoH or funding partners. These reports will detail the overall performance of the ESMP, compliance status, challenges, and future plans.
  - **Audit Reports:** Prepared by external auditors and submitted to AHRI Management and potentially relevant authorities.

## 7. Emergency Preparedness and Response Plan

An emergency is an unforeseen event or situation that poses risks to human health, property, or the environment, affecting either the facility itself or the surrounding community and sectors/offices. Emergency response plans for Bole Airport Isolation Center is critical to ensuring safety and minimizing disruptions during various disaster scenarios.

The emergency response plan is designed to ensure the safety of all personnel, experts and patients, and protect facility assets, maintain compliance with regulatory and donor requirements, and facilitate a quick recovery and continuity of operations. To ensure effective emergency preparedness and response, key personnel have been designated along with their specific responsibilities. Various emergency scenarios have been identified, and response actions have been established based on best practices. Additionally, general recommendations have been included.

### 7.1. Key Personnel and Their Responsibilities

Table 4: Key Personnel and Their Responsibilities for Emergency Preparedness and Response

| S.No | Key Personnel | Responsibilities |
|------|---------------|------------------|
|------|---------------|------------------|

| S.No | Key Personnel         | Responsibilities  |
|------|-----------------------|---|
| 1.   | Isolation Center Head | <ul style="list-style-type: none"> <li>● Overall authority during emergencies.</li> <li>● Communicate with external authorities (local emergency services, regulatory bodies).</li> <li>● Ensure that the emergency response plan is reviewed and updated regularly.</li> <li>● Lead post-incident reviews and implement improvements.</li> </ul>   |
| 2.   | Safety Officer        | <ul style="list-style-type: none"> <li>● Develop and maintain the emergency response plan.</li> <li>● Conduct regular safety drills and training for all staff.</li> <li>● Oversee the safety equipment inventory (e.g., PPE, first aid kits).</li> <li>● Act as the primary contact for safety-related issues during an emergency.</li> <li>● Coordinate with local emergency services for support.</li> </ul> |
| 3.   | Security Department   | <ul style="list-style-type: none"> <li>● Control access to the facility during an emergency.</li> <li>● Assist in the evacuation process, ensuring all personnel are accounted for.</li> <li>● Maintain communication with the Safety Officer regarding any security threats.</li> </ul>  |
| 4.   | General Staff         | <ul style="list-style-type: none"> <li>● Attend training sessions on emergency procedures and protocols.</li> <li>● Participate in drills and exercises.</li> <li>● Follow instructions from the Safety Officer and Isolation Center Head during emergencies.</li> <li>● Report any hazards or unsafe conditions immediately.</li> <li>● Assist in evacuating personnel if necessary.</li> </ul>                |

## 7.2. Emergency Scenarios and Procedures

Table 5: Emergency Scenarios and Procedures

| S.N | Emergency Scenarios         | Action to be taken   |   |
|-----|-----------------------------|--|---|
|     |                             | Immediate action   | Post-Emergency action   |
| 1.  | Potential disease outbreaks | <ul style="list-style-type: none"> <li>● Move affected individuals to designated isolation rooms using infection prevention and control (IPC) procedures.</li> <li>● Ensure PPE use, restrict area access, and initiate surface disinfection.</li> <li>● Identify and record all individuals who had contact with the suspected case.</li> <li>● Report to national public health institute (e.g., EPHI) and WHO contact point as per IHR requirements.</li> </ul> | <ul style="list-style-type: none"> <li>● Monitor exposed individuals and staff for symptoms for the recommended incubation period.</li> <li>● Safely disinfect all affected areas and dispose of biohazard waste following approved procedures.</li> <li>● Record event details, response measures, and outcomes for reporting and evaluation.</li> <li>● Conduct an after-action review to assess response effectiveness and identify gaps.</li> </ul> |

| S.N | Emergency Scenarios                        | Action to be taken  |   |
|-----|--|---|---|
|     |  | Immediate action  | Post-Emergency action   |
| 2.  | Fire Emergency                             | <ul style="list-style-type: none"> <li>● Activate fire alarms and notify the fire department.</li> <li>● Evacuate all personnel according to the evacuation plan.</li> <li>● Use fire extinguishers on small fires if safe to do so.</li> </ul>   | <ul style="list-style-type: none"> <li>● Conduct a headcount to ensure everyone is safe.</li> <li>● The Safety Officer will assess damage and coordinate with fire officials.</li> </ul>  |
| 3.  | Explosion                                  | <ul style="list-style-type: none"> <li>● Activate the fire alarm system to alert all personnel.</li> <li>● Initiate immediate evacuation of all staff, patients, and visitors from the affected area.</li> <li>● Dial emergency services and report the explosion, providing details about the location and nature of the incident.</li> <li>● Designate a safety officer to assess the immediate area for further hazards (e.g., gas leaks, fire).</li> <li>● Ensure that no one re-enters the area until deemed safe by emergency responders.</li> <li>● If safe to do so, shut off the main gas supply and other utilities in the vicinity to prevent further incidents.</li> <li>● Activate emergency shut-off valves for medical gas systems if accessible and safe.</li> <li>● Render first aid to any injured individuals if trained personnel are available, while waiting for emergency medical services to arrive.</li> </ul> | <ul style="list-style-type: none"> <li>● Conduct a headcount to ensure everyone is safe.</li> <li>● Report any missing individuals to emergency services for search and rescue operations.</li> <li>● Document the incident, including time, location, nature of the explosion, and any injuries sustained.</li> <li>● Complete an incident report as per hospital protocols and notify relevant authorities.</li> <li>● Initiate an investigation into the cause of the explosion with appropriate personnel (safety officers, facility management, etc.).</li> <li>● Communicate with staff, patients, and families regarding the incident, ensuring transparency while maintaining confidentiality.</li> <li>● Provide updates on recovery efforts and any necessary changes in hospital operations.</li> <li>● After the incident, review the emergency response plan to identify areas for improvement.</li> </ul> |
| 4.  | Natural Disaster (e.g., earthquake, flood) | <ul style="list-style-type: none"> <li>● Follow established protocols for securing equipment and materials.</li> <li>● Evacuate to designated safe areas or shelters as per the disaster plan.</li> </ul>   | <ul style="list-style-type: none"> <li>● Assess structural integrity of the facility before re-entry.</li> <li>● Communicate with local authorities for recovery efforts.</li> </ul>  |
| 5.  | Active Shooter or Security Threat          | <ul style="list-style-type: none"> <li>● Lockdown the facility and secure all entry points.</li> <li>● Notify law enforcement immediately.</li> <li>● Follow "Run, Hide, Fight" protocol as appropriate.</li> </ul>   | <ul style="list-style-type: none"> <li>● Conduct a headcount after the situation is resolved.</li> <li>● Provide mental health support to affected employees.</li> </ul>  |

## **8. Stakeholder Engagement and Information Disclosure**

Meaningful and continuous stakeholder engagement is being undertaken with a wide range of relevant stakeholders through both formal and informal consultation mechanisms. This engagement process is designed to be sustained throughout project implementation and will continue into the operational phase of the facilities, ensuring that stakeholder perspectives are systematically considered and addressed.

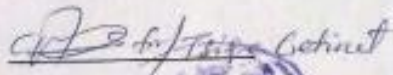
In line with World Bank Environmental and Social Standards, the Environmental and Social Management Plan (ESMP) will be publicly disclosed on the EPHI website upon clearance by the World Bank. In addition, a dedicated grievance redress mechanism is in place to ensure transparency and accountability. Any concerns, complaints, or feedback related to the project may be submitted, anonymously, if desired through the designated project email address: [project.grievance@ephi.gov.et](mailto:project.grievance@ephi.gov.et).

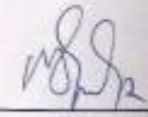
ANNEX


Annex 1: Site Handover Documentation


**Ethiopian Airports**  
**Business Development and Commercial Administration Manager**  
**Site handover**


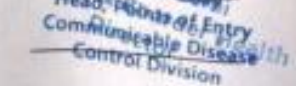
On this **30<sup>th</sup> day of July 2025**, Ethiopian Airports Business Development and Commercial Administration Department has handover area of **300 M<sup>2</sup>** location **Code No** \_\_\_\_\_ situated at Addis Ababa Bole International Airport Gereji Custom area **for Isolation Center** to the EPHI, **Ethiopian Public Health Institute**. In witnesses whereof, this document is signed by all parties in two copies.

  
For the Owner

  
For the Tenant

  
Witnesses

  
Dr. Melkamu Abte  
Deputy Director General

| <u>Name</u>                    | <u>Signature</u>   | <u>Date</u>       |
|--------------------------------|--|-------------------|
| 1. <u>Ashenafi Sisay Asfaw</u> | <br>Travel & Tourism<br>Head of Entry<br>Communicable Disease<br>Control Division | <u>30/7/2025</u>  |
| 2. <u>Messale Gadejau</u>      |    | <u>30/07/2025</u> |

## **Annex 2: Minutes of the Stakeholder Consultation BIA Point of Entry Isolation Center**

In line with World Bank Environmental and Social Standard 10 (ESS10) on Stakeholder Engagement and Information Disclosure, stakeholder consultations were conducted to ensure that the proposed project is designed and implemented in an inclusive, transparent, and participatory manner. ESS10 emphasizes the importance of early and continuous engagement with relevant stakeholders to identify concerns, manage risks, and incorporate stakeholder inputs into project design and decision-making. Accordingly, Stakeholder consultation was undertaken as a critical step to ensure the effective and compliant implementation of the proposed project within the compound of an international airport. Given the sensitive nature of the location, consultations were held with key institutions, including Ethiopian Airports Enterprise (Business Development and Commercial Administration Manager), National Intelligence and Security Service (NISS), and Addis Ababa City Roads and Transport Bureau.

During the consultation, representatives from the EPHI Travelers' and Border Health Directorate, together with engineers from the Ministry of Health (MoH) PHILEO, presented a detailed explanation of the project objectives, scope, and proposed design. The Ethiopian Airports Enterprise emphasized that the facility height must strictly comply with airport safety and aviation regulations. Accordingly, it was recommended that the building height be limited to a G+1 structure to avoid interference with airport operations. This recommendation was accepted by the MoH and EPHI, and the facility design was adjusted to fully comply with the stated requirement.

Given the proximity of the project site to the VIP airport entrance, the NISS raised concerns related to national security and potential risks to their operations. Following detailed discussions, agreement was reached on appropriate mitigation measures. These include constructing a solid boundary wall on the side facing the NISS facility, with no windows or doors, to prevent any potential surveillance or security breach. Consequently, the building orientation was revised to face east, ensuring that the side adjacent to the NISS facility remains completely closed and secured.

In addition, the Addis Ababa City Roads and Transport Bureau raised concerns regarding the use of the VIP access road for construction activities, noting that the road is restricted and not permitted for heavy truck movement. It was agreed that transportation of construction materials

would be planned and implemented in close coordination with the Bureau to minimize security risks, traffic disruption, and operational interference.

All stakeholders acknowledged the importance of continued engagement throughout the construction, commissioning, and operational phases of the project. It was agreed that consultations would remain ongoing to address emerging issues and ensure compliance with regulatory, security, and environmental and social requirements. Photographic documentation of the consultation could not be provided, as participants did not consent to photography.

### Annex 3: Environmental and social screening Report of BIA Isolation Center

#### Identification of Environmental and Social Impacts for Bole Airport Isolation Center

| No   | Description  | Yes | No | Not known |
|--|--|-----|----|-----------|
| <b>ENVIRONMENTALLY SENSITIVE AREAS OR THREATENED SPECIES THAT COULD BE ADVERSELY AFFECTED BY THE PROJECT</b> |  |     |    |           |
| 1  | Intact natural forests   |     | √  |           |
| 2  | Riverine forest and river banks  |     | √  |           |
| 3  | Surface water courses, natural springs   |     | √  |           |
| 4  | Wetlands (lakes, rivers, swamp, seasonally inundated areas)  |     | √  |           |
| 5  | Distance to the nearest wetland (lakes, river, seasonally inundated areas) less than 30 km:  |     | √  |           |
| 6  | Area is of high biodiversity   |     | √  |           |
| 7  | Habitats of endangered/threatened species for which protection is required under Ethiopian's Laws.   |     | √  |           |
| <b>GEOLOGY, TOPOGRAPHY AND SOIL</b>  |  |     |    |           |
| 1  | Direct cause or worsening of soil loss or erosion by the project   |     | √  |           |
| 2  | Project will lead directly or indirectly to practices that could cause soil loss or erosion (e.g. soil erosion and pit formation from sand mining and brick molding) | √   |    |           |
| 3  | Modification of slopes is required by the project  |     | √  |           |
| 4  | Project will affect stability of slopes directly or indirectly   |     | √  |           |
| 5  | Project is located where existing unstable slopes could be a hazard  |     | √  |           |
| 6  | Soil instability in the project area black cotton soil, earthquake, landslide, subsidence  |     | √  |           |
| 7  | Project will cause substantial increase in soil salinity   |     | √  |           |
| 8  | Increase in chances of floods, poorly drained, low-lying, depression or block run-off – water  |     | √  |           |
| 9  | Soil contamination and pollution hazards will result from the Project  |     | √  |           |
| 10   | Risks of contamination and pollution from latrines, dump sites, industrial discharge etc.  | √   |    |           |
| <b>LAND, TREES, VEGETATION AND PROPERTY (IN CASE OF AUXILIARY e.g. QUARRIES)</b>                             |  |     |    |           |
| 1  | There are farm lands in the project area   |     | √  |           |
| 2  | Project will reduce or damage farm land  |     | √  |           |
| 3  | Project will cause loss of vegetation, crops and fruit trees animals and livestock   |     | √  |           |
| 4  | Loss of trees for fire wood for brick curing, adding to Deforestation  |     | √  |           |
| 5  | Use of construction timber for supports, door/widows and furniture contributing to deforestation.  |     | √  |           |
| 6  | Project will cause loss of houses, infrastructures (shed, toilets, granaries)  |     | √  |           |
| 7  | Project will cause loss or interference with access, routes for people, livestock etc  |     | √  |           |
| 8  | Land in the project area is intensively developed  | √   |    |           |
| 9  | The project will increase pressure on land resources   |     | √  |           |
| 10   | The project will result in decreased holdings by small land owners   |     | √  |           |
| <b>SURFACE WATER QUANTITY AND QUALITY</b>  |  |     |    |           |
| 1  | Project will increase demand or cause loss of available surface Water  |     | √  |           |
| 2  | Project will lead to additional discharges into surface water  |     | √  |           |

|   |   |   |   |  |
|---|---|---|---|--|
| 3   | Project could cause deterioration of surface water quality  |   | √ |  |
| <b>GROUNDWATER QUALITY AND QUANTITY</b>                       |   |   |   |  |
| 1.  | Project will increase demand or cause loss of available ground water resources                          |   | √ |  |
| 2.  | Project will cause natural or man-made discharge into ground aquifer                                    |   | √ |  |
| 3.  | Project could cause deterioration of ground water quality (e.g. from human waste from toilets)          | √ |   |  |
| <b>AIR QUALITY</b>  |   |   |   |  |
| 1.  | Project will pollute air directly (construction cement /dust)   | √ |   |  |
| 2.  | Project will lead to practices that worsen air quality  | √ |   |  |
| 3.  | Project will lead to a change in engine or fuel use that could cause serious air problems               |   | √ |  |
| 4.  | Project will result in polluted and hazardous working environments for staff                            |   | √ |  |
| <b>NOISE</b>  |   |   |   |  |
| 1.  | Noise is a problem in the project area. The project will generate noise from construction activities    | √ |   |  |
| 2.  | Project operation will result in increase in noise generation   | √ |   |  |
| 3.  | Project could make people to move to high noise level area  |   | √ |  |
| 4.  | Project could result in noisy working environments for staff  | √ |   |  |
| <b>AQUATIC ECOSYSTEMS</b>                                     |   |   |   |  |
| 1.  | Significant aquatic ecosystems (wetlands, rivers, streams, lakes or ponds) are in the project area      |   | √ |  |
| 2.  | Project will affect the condition and use of ecosystems for human consumptions                          |   | √ |  |
| 3.  | Significant wetland ecosystems (marsh, swamp, flood plains, or estuary) are in the project area         |   | √ |  |
| 4.  | Project will affect the use or condition of such wetlands   |   | √ |  |
| <b>TERRESTRIAL ECOSYSTEMS</b>                                 |   |   |   |  |
| 1.  | There are significant terrestrial ecosystem (forest, savannah, grassland or desert) in the project area |   | √ |  |
| 2.  | Project will affect the use or condition of such ecosystems   |   | √ |  |
| <b>ENDANGERED/ THREATENED/RARE/ENDEMIC/SPECIES</b>            |   |   |   |  |
| 1.  | Endangered species exist in the project area  |   | √ |  |
| 2.  | Project will affect the habitat and number of such species  |   | √ |  |
| <b>MIGRATORY SPICES</b>                                       |   |   |   |  |
| 1.  | Migratory fish, birds, or manuals use the project area  |   | √ |  |
| 2.  | Project will affect the habitat and numbers of such species   |   | √ |  |
| <b>BENEFICIAL PLANTS, ANIMALS, INSECTS, PESTS AND VECTORS</b> |   |   |   |  |
| 1.  | There are non-domesticated plants and/or animals, used or sold by local people in the project area      |   | √ |  |
| 2.  | Project will affect these species by reducing their numbers or habitat                                  |   | √ |  |
| 3.  | There are currently problems with pest (plants or animals) in the project area                          |   | √ |  |
| 5.  | Plants or animals might become pests due to ecological changes brought by the project in the area       |   | √ |  |
| 6.  | There are known disease problems in the project area transmitted through vectors                        |   | √ |  |
| 7.  | Project will increase vector habitat or population  |   | √ |  |
| <b>ENERGY SOURCE</b>  |   |   |   |  |
| 1.  | The project will increase demand for conventional energy sources  | √ |   |  |

|   |   |   |   |  |
|---|---|---|---|--|
| 2.  | The project will create demand for other energy sources (wood and charcoal)   |   | √ |  |
| 3.  | The project will promote supply of conventional energy sources  |   | √ |  |
| <b>RESOURCE DISTRIBUTION AND DEGRADATION</b>                        |   |   |   |  |
| 1.  | The project will increase demand for certain commodities within or outside the project area   |   | √ |  |
| 2.  | The project will result in decrease of production for certain vital commodities   |   | √ |  |
| 3.  | Project will use large amounts of natural resources (construction materials, water, land and energy)                                      |   | √ |  |
| 4.  | Adverse impacts of the project will be unequally distributed in the target population   |   | √ |  |
| <b>EMPLOYMENT AND INCOME</b>  |   |   |   |  |
| 1.  | The project will remove job opportunities from the area   |   | √ |  |
| 2.  | The project will decrease income sources or means of livelihood   |   | √ |  |
| <b>LIVELIHOODS</b>  |   |   |   |  |
| 1.  | People's assets or livelihoods will be affected   |   |   |  |
| 2.  | People will lose access to natural resources  |   |   |  |
| <b>EXISTING AND MIGRANT POPULATION (IN CASE OF AUXILIARY WORKS)</b> |   |   |   |  |
| 1.  | There are people currently living in or near the project area   | √ |   |  |
| 2.  | The project will affect people in or near the project area  | √ |   |  |
| 3.  | There are currently mobile groups in the target population  |   | √ |  |
| 4.  | The project will result in the movement of people in or out of the area   | √ |   |  |
| 6.  | Cultural characteristics unique to the project area are understood  |   | √ |  |
| 7.  | The project will adversely affect religious and/or cultural attitudes of area resident  |   | √ |  |
| 8.  | The project will affect religious and or cultural sites or monuments  |   | √ |  |
| <b>HISTORICAL BUILDINGS, SACRED AREAS AND TABOOS</b>                |   |   |   |  |
| 1.  | There are special superstitions or taboos that will affect acceptance of the project  |   | √ |  |
| 2.  | There are graveyards in the project area  |   | √ |  |
| 3.  | There are historical buildings in the area  |   | √ |  |
| <b>TOURISM AND RECREATION</b>                                       |   |   |   |  |
| 1.  | There is a significant degree of tourism in the area  |   | √ |  |
| 2.  | There is unexploited tourism or recreation potential in the area  |   | √ |  |
| 3.  | The project will adversely affect existing or potential tourist or recreation attractions   |   | √ |  |
| <b>GENERAL AND HAZARDOUS WASTES</b>                                 |   |   |   |  |
| 1.  | The project will generate significant amounts of waste (rubble: concrete, bricks, blocks etc) during construction                         | √ |   |  |
| 2.  | The project will generate significant amounts of waste (e.g. plastics and packaging material) during operation                            | √ |   |  |
| 3.  | The project will produce hazardous wastes requiring special handling, storage, treatment and disposal methods                             | √ |   |  |
| 4.  | The project will cause spread of infection within and outside the facility requiring adherence to standards and precautions               | √ |   |  |
| 5.  | Is there existing or planned hazardous solid wastes disposal facilities that could serve during the operation of the proposed sub-project |   | √ |  |

### **Description for Impacts Identified for Bole Airport Isolation Center**

| S.no | Impact   | Description  |
|------|--|--|
| 1.   | Soil loss or erosion:  | Construction activity will indirectly lead to practices that could cause soil loss or erosion from sand mining activities.   |
| 2.   | Risks from latrines and dump sites                                   | This is mainly related with operation of the Isolation Center. Less related with the construction activity as the construction site is in Addis Ababa; there would be access to standard latrine. It is just to mention there is a risk of contamination during emptying.  |
| 3.   | Ground water quality   | This related with waste management (sewage, reagents, sample, incinerator ash) disposal burden incase of wasted disposal gap.  |
| 4.   | Air quality impact   | This could be related with cement use, removal of existing paints (very localized); the impact is very minimal.  |
| 5.   | Noise  | This is related with wall drilling activities, carpentry works, and use of grinder. This is also localized, very minimal, intermittent, short term.  |
| 6.   | Hazardous and infectious wastes                                      | This is mainly associated to the operational phase, not to renovation activities. During the operation phase of the sub-project various wastes are expected to be generated from the isolation center. Since the risk associated with an isolated traveler is uncertain until lab test results are available, which could indicate unknown risk wastes may be generated. Hence, it is essential for the facility to implement stringent safety measures in waste management. |
| 7.   | The project will result in movement of people in and out of the area | This shows the movement of renovation crew to work site and out of work site.  |
| 8.   | The project will affect people in or near the project area           | There existing infrastructure having varies services, these facilities are likely to be affected by construction activity related noises and dust. Moreover, during public health emergency there will be frequent mov't of vehicles i.e ambulance to and from the isolation centers. Hence, likely to be disturbed by the ambulance siren.  |

### Eligibility Screening for Bole Airport Isolation Center

| S.N | Will the sub-project or business plan   | YES | NO |
|-----|---|-----|----|
| 1.  | Cause significant involuntary displacement of people or social disturbances, involuntary loss of assets?  |     | *  |
| 2.  | Disrupt the quality or quantity of water in a waterway shared with other nations  |     | *  |
| 3.  | Cause degradation of critical natural habitats cause any loss of biodiversity? Cause any large-scale physical disturbance of the site or the surroundings |     | *  |
| 4.  | Affect important physical and cultural resources (historical, religious, archaeological sites and monuments) ?  |     | *  |
| 5.  | Affect any vulnerable or underserved groups   |     | *  |
| 6.  | Implemented in or around non-viable community centers (CCs)   |     | *  |
| 7.  | Likely to use pesticides or other agro-chemicals?   |     | *  |

**Recommendations:** Sub-project is eligible and approved

## Environmental and Social Impact Rating

| Environmental and Social Feature  | Impact rating |     |        |      |         |
|---|---------------|-----|--------|------|---------|
| Social Issues   | None          | Low | Medium | High | Unknown |
| Reduce other people access to their economic resources, like land, pasture, water, public services or other resources that they depend on   | √             |     |        |      |         |
| Interference with access routes for people, livestock and wildlife or traffic routing and flows   | √             |     |        |      |         |
| Result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?                             | √             |     |        |      |         |
| Result in the temporary or permanent loss of crops, fruit trees and household infra-structure (such as granaries, outside toilets and kitchens, etc.)?                                | √             |     |        |      |         |
| Effect on historical, archaeological or cultural heritage site?   | √             |     |        |      |         |
| Effect on vulnerable people and underserved groups (e.g., elderly poor pensioners, physically challenged, women, particularly head of households or widows, etc.) living in the area? | √             |     |        |      |         |
| Environmental issues  |               |     |        |      |         |
| Effect on river, lake and wetland ecology   |               | √   |        |      |         |
| Effect on plant, livestock or fishery or any other aquatic biodiversity   | √             |     |        |      |         |
| Effect on protected areas designated by government (national park, national reserve, world heritage site)   | √             |     |        |      |         |
| Effect on soil and water (surface or ground water) contamination and pollution  |               |     | √      |      |         |
| Effect on aesthetic attractiveness of the local landscape   |               |     | √      |      |         |
| Effect on the surrounding background noise level  |               |     | √      |      |         |
| Result in emission of copious amounts of dust, hazardous fumes  |               |     | √      |      |         |
| Generate solid and/or liquid wastes (including human excreta/sewage and/or/ livestock waste)  |               |     |        | √    |         |
| Generate air pollutants and/or greenhouse gases   |               |     | √      |      |         |
| Human health issues   |               |     |        |      |         |
| Occupational health effects/ accidents and injuries to workers during construction or operation   |               |     |        | √    |         |
| Health effects (communicable disease such as malaria, tb, HIV/Aids or non-communicable diseases –from toxic chemicals), specify_____  |               |     |        | √    |         |

**Recommendation:** *ESMP is required*

## Annex 4: Checklist for Data collection

| Baseline date  | Parameter  | Description |
|--|--|-------------|
| 1. Demography of the proposed project implementation area                | Population number (male and female)  |             |
|  | Age group  |             |
|  | Religion   |             |
|  | Ethnicity  |             |
|  | Type of livelihood (Agriculture, commercial or both)   |             |
|  | Livelihoods and employment rate to the city  |             |
|  | Birth/Death rates  |             |
| 2. Physical Environment  | 2.1 Description of the project site including boundary areas   |             |
|  | 2.1 Air resource such as meteorological data (Temperature, wind and wind direction), Ambient air quality (Particulates), Stationary source of emission; mobile source of emission (e.g Cars and truck etc)   |             |
|  | 2.3 Water Resource   |             |
|  | Surface water: such as location and type (e.g estuaries, streams lakes and their position relative to the site, water quality information (e.g BOD, COD, temperature, nutrients), existing pollutant source (location and amount of discharge), future uses  |             |
|  | Ground water: description of key factors (e.g., depth to water table, overlying soil, geologic features), water quality information (e.g pH, Solid),   |             |
|  | 2.4 Soil and Geology: topography, soil structure, ground water movement, erosion potential, subsidence, seismic activity (e.g proximity to faults, history of earthquakes and volcanic eruptions), mineral resources (e.g locations of deposit, type and quantities, ownership of mining right)  |             |
|  | 2.5. Natural Calamities Risks: Project Construction Site (Risk of Earthquake, flood, volcanic eruption will be assessed)   |             |
| 2.6. Wind direction (wind direction and wind speed will be investigated) |  |             |
| 3. Biological Conditions   | 3.1 Wildlife and vegetation: description and listing of aquatic, wetland, and terrestrial flora and fauna (e.g species list and abundances), description and listing of native species of wildlife and vegetation present, description and listing of particularly invasive exotic species of wildlife and vegetation, description and listing of rare and |             |

|  |   |  |
|--|---|--|
|  | threatened species,   |  |
|  | 3.2 community and Habitat Characterization: maps and description of the aquatic, wetland, and terrestrial communities found in and around the project site,   |  |
|  | 3.3 Ecologically significant features: support of broader ecosystem by the project site (e.g nutrient source through flooding, storm water retention), important ecological functions of the project site (e.g nutrient source through flooding storm water retention), characterization of relevant disturbance regimes, natural and project-induced (e.g flood, fire, potential impact of logging), description of important biotic interactions (e.g interdependence of plant and animals at the site and with other site)   |  |
| 4. Waste Management and pollution prevention | Estimation of expected waste disposal or discharge  |  |
|  | Assessment of available waste disposal sites in Addis Ababa (capacity, current condition and future capacity)   |  |
|  | Description of waste management techniques (E.g treatment, storage, transport, recycling for each type of waste)  |  |
|  | Project waste characterization (e.g types, quantities, toxicity profile) focus on clinical wastes and municipal solid waste separately  |  |
| 5. Socioeconomic Environment                 | 5.1 Land use: like description of present and historic land use, map of present and historic land use,  |  |
|  | 5.2 Population and Housing: demographic information (e.g average household size, age, age/sex distribution, Ethnic composition, and community cohesion)   |  |
|  | 5.3 Economic Activity: description of present economic activity (e.g number and type of business, annual revenues, ownership patterns), Description of unique features of business community (e.g high seasonality of trade, high outflow of profit, declining of trade, or downtown revitalization)  |  |
|  | 5.4 Community service and public finance: description of existing public facility and services within vicinity of project including existing level of use and remaining capacity to accommodate growth, This include road, health facility (Number of clinics, health centers, health posts, hospitals, Diagnostic centers), school (Kindergarten primary school, secondary school, college, university, Girls and boys enrolment rate), water and sanitation, electricity, Telecommunications; Communal and Recreation Facilities, market, recreational areas, green areas |  |
|  | 5.5 Transportation: Description of all relevant forms of transportation for facility,   |  |

|                             |  |  |
|-----------------------------|--|--|
|                             | current traffic volume, current traffic capacity, provision of public transportation, assessment of the adequacy of the system for meeting peak demands during construction and operation phase;   |  |
|                             | 5.6 Health and safety: description of present health and safety issues, description of possible risks of the project, identification of special populations areas more likely to be exposed to adverse impacts, identification of top ten disease of the area, |  |
|                             | 5.7 waste treatment and disposal sites: Assessment of the capacity/due diligence of Solid and wastewater treatment plants related to the proposed facility.  |  |
| 6. Cultural resource        | 6.1 Archeological sites relating to the project, paleontological sites related to the project, historic sites in relation to the project, education, religious scientific, or cultural sites in relation to the project,                                       |  |
| 7. Project characterization | 7.1 Project description: Name, ownership, establishment, vision, mission, objective; type of facility available, project components, location of the project including Google map, Description of the proposed Project.  |  |
|                             | 7.2 Design requirements of construction project and: general design and safety requirements  |  |
|                             | 7.5 Waste management approaches and practices: Types and quantity of waste generated, waste management practices   |  |
|                             | 7.6 Utility requirements: water supply and consumption, source of energy and consumption, amount of fuel required, amount of natural gas required, oil and grease requirements,  |  |
| 8. Public consultation      | 8.1 Stakeholder engagement: identification of stakeholders such as Woreda EPA officer, Woreda Socio-economic office, plan commission, health office, education office, Cultural and tourism office, sanitation office (City administration and Woreda level),  |  |
|                             | 8.2 Public consultation: selection of participants from youth, elders' business community, residents around the project site, community leaders, religious leaders, affected and interested parties  |  |

## Annex 5: Construction Site Safety Requirement Checklist

## Project Information

- Project Name: \_\_\_\_\_
- Project Location: \_\_\_\_\_
- Project Manager: \_\_\_\_\_
- Date: \_\_\_\_\_

## Safety Checklist

| Safety Measure                                 | Yes                      | No                       | N/A                      | Comments |
|--|--------------------------|--------------------------|--------------------------|----------|
| Personal Protective Equipment available & used | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Clear walkways and exits                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Proper signage displayed                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Fire extinguishers accessible                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| First aid kits available                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Emergency contact numbers visible              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Equipment inspected and maintained             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Safe storage of materials                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Scaffolding secured                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Tools and equipment properly stored            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Adequate lighting provided                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Chemical hazards labeled                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Fall protection in place                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Electrical safety measures implemented         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |

## Incident Reporting

- Incident Description: \_\_\_\_\_
- Date and Time: \_\_\_\_\_
- Location: \_\_\_\_\_
- Persons Involved: \_\_\_\_\_
- Immediate Actions Taken: \_\_\_\_\_

## Signatures

- Inspector's Signature: \_\_\_\_\_
- Date: \_\_\_\_\_
- Project Manager's Signature: \_\_\_\_\_
- Date: \_\_\_\_\_

## Annex 6: Incident Report Form

The following report form is to be completed by the responsible PIU within 24 hours in the case of an incident:

### **Part B of ESIRT- To be completed by Borrower within 24 hours**

|  |                                  |   |                             |
|--|----------------------------------|---|-----------------------------|
| <b><u>B1: Incident Details</u></b>   |                                  |   |                             |
| <b>Date of Incident:</b>   | <b>Time:</b>                     | <b>Date Reported to PIU:</b>  | <b>Date Reported to WB:</b> |
| <b><u>Reported to PIU by:</u></b>  | <b><u>Reported to WB by:</u></b> | <b><u>Notification Type:</u> Email/'phone call/media notice/other</b> |                             |
| <b>Full Name of Main Contractor:</b>   |                                  | <b>Full Name of Subcontractor:</b>                                    |                             |
| <b><u>B2: Type of incident (please check all that apply)</u></b>   |                                  |   |                             |
| Fatality <input type="checkbox"/> Lost Time Injury <input type="checkbox"/> Displacement Without Due Process <input type="checkbox"/> Child Labor <input type="checkbox"/> Acts of Violence/Protest <input type="checkbox"/><br>Disease Outbreaks <input type="checkbox"/> Forced Labor <input type="checkbox"/> Unexpected impacts on heritage resources <input type="checkbox"/> Unexpected impacts on biodiversity resources <input type="checkbox"/> Environmental pollution incident <input type="checkbox"/> Dam failure <input type="checkbox"/> Other <input type="checkbox"/> |                                  |   |                             |
| <b><u>B3: Description/Narrative of Incident</u></b>  |                                  |   |                             |
| <ul style="list-style-type: none"> <li>● <u>What was the incident?</u></li> <li>● <u>What were the conditions or circumstances under which the incident occurred (if known)?</u></li> <li>● <u>Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?</u></li> <li>● <u>Is the incident still on-going or is it contained?</u></li> <li>● <u>Have any relevant authorities been informed?</u></li> </ul>   |                                  |   |                             |
| <b><u>B4: Actions taken to contain the incident</u></b>  |                                  |   |                             |
| <b><u>Short Description of Action</u></b>  | <b><u>Responsible Party</u></b>  | <b><u>Expected Date</u></b>   | <b><u>Status</u></b>        |
|  |                                  |   |                             |
|  |                                  |   |                             |
| <b>For incidents involving a contractor: Have the works been suspended under Contract GCC8.9? Yes <input type="checkbox"/>; No <input type="checkbox"/>;</b>   |                                  |   |                             |
| Name of Contractor: _____  |                                  |   |                             |
| <b><u>B5: What support has been provided to affected people?</u></b>   |                                  |   |                             |
|  |                                  |   |                             |

## Detailed Incident Investigation & Corrective Action Report Format

(to be completed after investigation, submitted to Supervising Engineer/Client and relevant authorities)

Project Name: \_\_\_\_\_

Project ID: \_\_\_\_\_

Incident Notification Form Ref. No.: \_\_\_\_\_

Date of Incident: \_\_\_ / \_\_\_ / \_\_\_\_

Date Investigation Report Submitted: \_\_\_ / \_\_\_ / \_\_\_\_

Investigating Team / Lead Investigator: \_\_\_\_\_

### 1. Incident Overview

**Description of Incident:** (what happened, when, where, who)

---

---

---

### Immediate Impacts:

People (injuries, fatalities): \_\_\_\_\_

Environment (spill, emissions, damage): \_\_\_\_\_

Property / Equipment: \_\_\_\_\_

\* **Photos / Diagrams:** (attach)

### 2. Root Cause Analysis

**Underlying causes:** (technical, organizational, human error, systems failure)

---

---

---

**Project-related factors:** (design, supervision, contractor performance, maintenance)

---

---

**External factors:** (weather, third-party actions, regulatory lapses)

---

---

1. Corrective & Preventive Actions

| # | Action Description | Responsible Person/Unit | Timeline | Status   |
|---|--------------------|-------------------------|----------|--|
| 1 |                    |                         |          | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Completed |
| 2 |                    |                         |          | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Completed |
| 3 |                    |                         |          | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Completed |

Signature \_\_\_\_\_ of \_\_\_\_\_ Lead Investigator: \_\_\_\_\_  
Date: \_\_\_ / \_\_\_ / \_\_\_

Reviewed by (Project Manager / EHS Manager): \_\_\_\_\_  
Date: \_\_\_ / \_\_\_ / \_\_\_



## **Annex 8: Environmental and Social Clauses**

### **1. General**

- a) The Contractor shall comply with the specific Environmental and Social Management Plan (ESMP) for the work he is responsible for. The Contractor shall prepare its own ESMP taking into account relevant provisions of that ESMP in the VMF ESMP.
- b) The Contractor shall prepare method statements indicating that during construction phase all significant adverse impacts arising from each activity have been appropriately addressed.
- c) The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan / strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.
- d) Besides the regular inspection of the sites by the Supervising Engineer (SE) for adherence to the contract conditions and specifications, the Owner may appoint an inspector to oversee the compliance with these environmental and social conditions and any proposed mitigation measures. Environmental Protection Authority (EPA), regional environmental authority or other relevant stakeholders may carry out similar inspection duties. In all cases, as directed by the SE, the Contractor shall comply with directives from such inspectors to implement measures required to ensure the adequacy of rehabilitation measures carried out on the bio-physical environment and compensation for socio-economic disruption resulting from implementation of all works.
- e) The Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work sites to acceptable standards, and abide by any environmental performance requirements specified in an ESMP.
- f) If the Contractor fails to implement the approved ESMP after written instruction by the Supervising Engineer (SE) to fulfill his obligation within the requested time, the Owner reserves the right to arrange through the SE for execution of the missing action by a third party on account of the Contractor.

### **2. Dust abatement**

- a) The contractor shall minimize the effect of dust on the surrounding environment resulting from earth moving sites, heavy truck movement, vibrating equipment, temporary access

roads, etc. to ensure safety, health and the protection of workers and surrounding sectors/offices.

- b) During the performance of the work and any operations appurtenant there to, the contractor shall carry out proper and efficient measures, such as sprinkling with water or other means, whenever necessary to reduce the dust nuisance, and to prevent dust which has originated from his operations from damaging crops, cultivated fields, and dwellings or causing a nuisance to persons. The contractor will be held liable for any damage resulting from dust originating from his operations.

### **3. Noise due to Construction Activities**

The contractor shall ensure the noise levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation, blasting) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby sectors/offices.

### **4. Protection of Archeological and Historical Sites**

- a) Upon discovery of ancient heritage, relics or anything that might or believed to be of archeological or historical importance during the execution of works, immediately suspend and report such findings to the SE so that the appropriate authorities may be expeditiously contacted for fulfilment of the measures aimed at protecting such historical or archaeological resources.
- b) The contractor shall take the necessary measures for preventing that any person or equipment may damage the article or things and shall provide barricades, fences, and signals and, if necessary, protect against atmospheric agents, as directed by the engineer. Also guard service may be required by the engineer.
- c) The supervising engineer shall take the following measures:
- Notify the relevant department of antiquities,
  - Request for representative to make site inspection,
  - Secession of work in the vicinity of the find until the visit of representative; and
  - Decision by the department of antiquities on possible salvage or excavation within 48-72 hours of notification

### **5. Vegetation and Wildlife**

- a) The contractor shall care, in planning, constructing, maintaining and operating temporary works such as toilet, change rooms, roads, spoil, stockpile and construction facilities areas,

to avoid unnecessary damage to areas of particular environmental interest, such as patches of valuable trees and erosion sensitive areas, as well as areas in which the presence of wildlife has been noted.

- b) In case some part of forest or single trees has to be removed, or where erosion problems that may affect some portion of the permanent or temporary works are expected, and in any case where in the engineer's opinion it is beneficial for the land conservation, landscaping, seeding and planting of trees, as well as executing drainages and water control works may be required to the contractor, who shall carry out the work according to the prescriptions contained in the pertinent sections of these specifications.
- c) No valuable trees shall be damaged or removed by the contractor during the execution of the works without the prior consent of the engineer.

## **6. Use of Material**

The contractor, in as much as possible, shall use local materials to avoid importation of foreign material and long-distance transportation.

## **7. Worksite Site Waste Management**

- a) All vessels (drums, containers, bags, etc.) containing oil/fuel/surfacing materials and other hazardous chemicals shall be banded in order to contain spillage. Used oil and hydraulic fluid generated on the construction sites must be collected in a closed container and stored temporarily in a safe place and sent to an authorized recycling depot.
- b) All drainage and effluent from storage areas, workshops and construction sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.
- c) The contractor shall take all possible steps to prevent pollution of streams, rivers, and other water supplies, at or in the vicinity of the site and shall comply with applicable laws, orders and regulations in force in the country of the works concerning the control and abatement of water pollution.
- d) Entry of runoff to the site shall be restricted by constructing diversion channels or holding structures such as banks, drains, dams, etc. to reduce the potential of soil erosion and water pollution.
- e) Construction waste shall not be left in stockpiles along the road, but removed and reused or disposed of on a daily basis and should be restricted within the project site.

- f) If disposal sites for clean spoil are necessary, they shall be located in areas, approved by the SE, for landfill and where they will not result in material being easily washed into drainage channels. Whenever possible, spoil materials should be placed in low-lying areas and should be compacted and dressed with top soil and then planted with species indigenous to the locality.
- g) The contractor shall provide all sanitary facilities (e.g. garbage collection and disposal, safety tank, drinking water facilities, etc.) are provided in construction sites.

#### **8. Rehabilitation and Soil Erosion Prevention**

- a) To the extent practicable, the Contractor shall rehabilitate the site progressively so that the rate of rehabilitation is similar to the rate of construction.
- b) Always remove and retain topsoil for subsequent rehabilitation. Soils shall not be stripped when they are wet as this can lead to soil compaction and loss of structure.
- c) Topsoil shall not be stored in large heaps. Low mounds of no more than 1 to 2m high are recommended.
- d) Re-vegetate the stockpiles with recommended grass species to protect the soil from erosion, discourage weeds and maintain an active population of beneficial soil microbes.
- e) Locate stockpiles where they will not be disturbed by future construction activities.
- f) The contractor shall reinstate natural drainage patterns where they have been altered or impaired.
- g) The contractor shall collect toxic materials from construction areas and keep protect in designated sites until proper disposal. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.
- h) Identify potentially toxic overburden and screen with suitable material to prevent mobilization of toxins.
- i) Ensure reshaped land is formed so as to be inherently stable, adequately drained and suitable for the desired long-term land use, and allow natural regeneration of vegetation.
- j) Minimize the long-term visual impact by creating landforms that are compatible with the adjacent landscape.
- k) Minimize erosion by wind and water both during and after the process of reinstatement.
- l) Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.
- m) Re-vegetate with plant species that will control erosion, provide vegetative diversity and, through succession, contribute to a resilient ecosystem. The choice of plant species for

rehabilitation shall be done in consultation with local research institutions, forest department and the local people.

### **9. Water Resources Management**

- a) The Contractor shall at all costs avoid conflicting with water demands of local sectors/offices.
- b) Abstraction of both surface and underground water shall only be done with the consultation of the local sectors/offices and after obtaining a permit from the relevant Water Authority.
- c) Abstraction of water from wetlands shall be avoided. Where necessary, permission has to be obtained from relevant authorities.
- d) No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.
- e) Wash water from washing out of equipment shall not be discharged into water courses without pretreated.
- f) Site spoils and temporary stockpiles shall be located away from the drainage system, and surface runoff shall be directed away from stockpiles to prevent erosion.

### **10. Traffic Management**

- a) Upon the completion of civil works, all access roads shall be ripped and rehabilitated
- b) Access roads shall be watered regularly to suppress dust emission.

### **11. Disposal of Unusable Elements**

- a) Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the SE. The Contractor has to agree with the SE which elements are to be surrendered to the Client's premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.
- b) Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.

### **12. Repair of Private Property**

- a) Should the Contractor, deliberately or accidentally, damage private property, he shall repair the property to the owner's satisfaction and at his own cost. For each repair, the

Contractor shall obtain from the owner a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.

- b) In cases where compensation for inconveniences, damage of crops etc. are claimed by the owner, the Client has to be informed by the Contractor through the SE. This compensation is in general settled under the responsibility of the Client before signing the Contract. In unforeseeable cases, the respective administrative entities of the Client will take care of compensation.

### **13. Contractor's Environment and Social Management Plan (ESMP)**

Within 6 weeks of signing the Contract, the Contractor shall prepare a C-ESMP to ensure the adequate management of the health, safety, environmental and social aspects of the works, including implementation of the requirements of these general conditions and any specific requirements of an ESMP for the works.

The Contractor's EHS-MP will serve two main purposes: -

- a) For the Contractor, for internal purposes, to ensure that all measures are in place for adequate EHS management, and as an operational manual for his staff, and,
- b) For the Client, supported where necessary by SE, to ensure that the Contractor is fully prepared for the adequate management of the EHS aspects of the project, and as a basis for monitoring of the Contractor's EHS performance.

The Contractor's EHS-MP shall provide at least: -

- a description of procedures and methods for complying with these general environmental and social management conditions, and any specific conditions specified in an ESMP;
- a description of specific mitigation measures that will be implemented in order to minimize adverse impacts;
- a description of all planned monitoring activities (e.g. sediment discharges from borrow areas) and the reporting thereof; and
- The internal organizational, management and reporting mechanisms put in place for such.

The Contractor's EHS-MP will be reviewed and approved by the Client before start of the works. This review should demonstrate if the Contractor's EHS-MP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

#### **13.1 Health and Safety**

- a) The contractor shall ensure that the project adheres to the Environmental, Health and Safety Guidelines in the ESMP.
- b) In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of HIV/AIDS.
- c) Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.
- d) Construction vehicles shall not exceed maximum speed limit of 40km per hour.

### **13.2 Traffic Safety**

- a) Ensure public safety, and meet traffic safety requirements for the operation of work to avoid accidents.
- b) The contractor shall be responsible for the safety along the roads related to the site, and he shall take all necessary precautions for the protection of the work and the safety of the public on the roads affected by his activities.
- c) Roads subject to interference by the work shall be kept open or suitable detours shall be provided and maintained by the contractor, who shall provide, erect, and maintain all necessary barricades, suitable and sufficient flashlights, flagmen, danger signals, and signs.
- d) The contractor shall submit his weekly activities schedule and the locations of his work along the existing public roads to the authorities concerned, and obtain all necessary approvals prior to commencement of the respective work.
- e) At the road crossings or in heavy traffic locations, the contractor shall carry out the work within the working hours as directed by the engineer, and after the completion of the work he shall immediately make the necessary backfill and pavement at the crossings.
- f) The contractor shall provide temporary passes and bridges to give access to the existing villages, houses, etc., to the satisfaction of the engineer and the authorities concerned whenever he disturbs such existing way during the execution of the works.

### **14. Workers and Contractors Code of Conduct**

- Construction Managers should be guided in all their relationships by the highest standards of integrity and honesty.
- Construction Managers and workers should conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation and value of the profession.

- Construction Managers and workers should avoid conduct or practices that deceive the public or represent a real or perceived conflict of interest.
- Construction Managers should respect the rights of others and should not discriminate on the basis of race, color, gender, marital status, religion, national origin, age, disability, or sexual orientation nor knowingly violate any law, statute, or regulation in the performance of professional services. Construction managers should strive to create a diverse workforce.
- Construction Managers should have a zero-tolerance policy for any form of harassment including sexual harassment and bullying.
- Contractors must not engage in the exploitation of child labour and contractors must take the necessary steps to prevent the employment of child labour.
- Contractors, their staff, sub-contractors and any other personnel engaged by the contractor, must not exploit the vulnerability of any target group in the context of development, humanitarian and advocacy work, especially women and children, or allow any person/s to be put into compromising situations. Never abuse a position to withhold development or humanitarian assistance, or give preferential treatment; in order to solicit sexual favours, gifts, payments of any kind, or advantage.
- The use of physical abuse, disciplinary punishment, sexual abuse, the threat of sexual and physical abuse, and other forms of intimidation may never be practiced by contractors and workers.

### **15. Reporting**

The Contractor shall prepare monthly progress reports to the SE on compliance with these general conditions, the project ESMP if any, and his own EHS-MP. It is expected that the Contractor's reports will include information on:-

- EHS management actions/measures taken, including approvals sought from local or national authorities;
- Problems encountered in relation to EHS aspects (incidents, including delays, cost consequences, etc., as a result thereof);
- Lack of compliance with contract requirements on the part of the Contractor;
- Changes of assumptions, conditions, measures, designs and actual works in relation to EHS aspects; and
- Observations, concerns raised and/or decisions taken with regard to EHS management during site meetings.

It is advisable that reporting of significant EHS incidents be done “as soon as practicable”. Such incident reporting shall therefore be done individually. Also, it is advisable that the Contractor keeps his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as appendixes to the bi-weekly reports. Example formats for an incident notification and detailed report are given below. Details of EHS performance will be reported to the Client through the SE’s reports to the Client.

## **16. Training of Contractor’s Personnel**

The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project EMP, and his own EHS-MP, and are able to fulfill their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the EHS-MP. General topics should be:-

- EHS in general (working procedures);
- Emergency procedures; and
- Social and cultural aspects (awareness creation)

## **17. Cost of Compliance**

It is expected that compliance with these conditions is already part of standard good workmanship and state of art as generally required under this Contract. The item “Compliance with Environmental and Social Management Conditions” in the Bill of Quantities covers these costs. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable EHS impact.

## **Annex 9: Chance Find Procedures**

Proclamation No. 209/2000, which focuses on the research and conservation of cultural heritage, establishes clear protocols for handling chance finds, as detailed in Article 41. According to this article, any individual who uncovers cultural heritage artifacts during activities such as mining, construction, or roadwork is required to report the discovery to the relevant Authority. The discoverer must ensure that the artifacts are preserved in their original state until the Authority can take possession of them.

The Authority is responsible for implementing appropriate measures to examine, receive, and register any cultural heritage items that are found. If the Authority does not act within six months of the report, the individual who made the discovery can be relieved of their responsibilities by providing a written notification that includes a comprehensive description of the circumstances to a Regional Government official.

To prevent damage to cultural properties, it is essential to engage in consultations with relevant authorities during project planning. This proactive approach helps identify known or potential archaeological sites. In the event of a chance find during construction, work must be halted immediately. The significance of the find must be assessed by the appropriate authorities in collaboration with local inhabitants. Only after this evaluation can suitable measures be taken to address the site and ensure its protection.

## **Annex 10: Grievance Redress Mechanism (GRM)**

This GRM is adopted from the GRM Guide Implementation Manual prepared for the World Bank-financed Africa CDC project. Grievances are anticipated during both the construction and operation phases of the Bole Airport Isolation Center project. This GRM establishes procedures, roles, and responsibilities for addressing and resolving disputes and complaints efficiently and transparently. The GRM aims to ensure that appropriate and mutually acceptable corrective actions are identified and implemented, that complainants are satisfied with the outcomes, and that conflicts are resolved without resorting to judicial proceedings.

The objectives of this GRM are to:

- Provide accessible channels for individuals, workers, nearby sectors/office, and organizations to raise concerns about the project's environmental and social impacts.
- Address grievances related to both the construction and operational phases of the Isolation center project.
- Ensure timely and fair resolution of complaints.
- Promote transparency and accountability in project implementation.
- Strengthen sectors/offices relations and prevent escalation of disputes.

### **12.1GM procedure**

The following steps will be used to manage all grievances:

#### **Step 1: Receipt and Registration of complaint**

- Complaints can be submitted through various channels:
  - In person to designated personnel of the Contractor and/or MOH/EPHI.
  - In person to facility manager or Travelers and Borderers Health Directorate, EPHI during operation.
  - Through Complaint register form.
  - Telephone to MOH (+251-11 551 7011).
  - Email to [moh@moh.gov.et](mailto:moh@moh.gov.et). Or [project.grievance@ephi.gov.et](mailto:project.grievance@ephi.gov.et)
  - Online application for the World Bank.
- The GRM focal person will receive the complaint and record it in a complaints log, including the date, action taken, and information provided to the complainant.

- The log will indicate grievances, the date lodged, action taken to address the complaint or reasons the grievance was not acted on; information provided to the complainant and date the grievance was closed.
- The complaint shall be recorded, read back to the complainant to confirm accuracy, and signed by the complainant.
- Contact information for the GRM focal person will be widely disseminated through the project website, public meetings, and project brochures.

## **Step 2: Eligibility and Assessment**

- The focal point will establish the eligibility of the complaint based on the following criteria:
  - The complainant is identifiable and has provided contact details.
  - The complainant is affected by the project.
  - The complaint has a direct relationship to the project.
  - The issues raised fall within the GRM's mandate.
- If the complaint is ineligible, the complainant will be informed with reasons.
- If eligible, the seriousness of the complaint will be assessed (high, medium, or low) based on:
  - Severity of the problem.
  - Potential impact on the well-being of an individual or group.
  - Potential impact on the project.
  - Public profile of the issue.
- Assessment may involve field visits, discussions with complainants and relevant parties, and information verification.

## **Step 3: Formulation of response and corrective action**

- A response will be formulated and communicated to the complainant, including:
  - Acceptance or rejection of the complaint.
  - Reasons for acceptance or rejection.
  - Next steps and where to forward the complaint (if applicable).
  - A timeframe for resolution.
  - Requests for further documents or evidence (if needed).

- If the complaint is resolved at this stage, the corrective action and timeframe will be determined in consultation with the complainant and recorded in the complaint log.
- Grievances will be resolved, and status reported back to complainants within a week. If more time is required, the complainant will be informed.
- Unresolved cases will undergo detailed investigations, with results discussed within one month of lodging the grievance.
- Complainants have the right to seek legal recourse if they believe their grievance was not handled fairly.

### **Step 3: Meeting with the complainant**

- The proposed corrective action and timeframe will be discussed with the complainant within one week of receiving the grievance.
- Consent to proceed with the corrective action will be sought from the complainant.

### **Step 4: Implementation of corrective action**

- Agreed corrective action will be implemented by the project or contractor within the agreed timeframe.
- The date of completion will be recorded in the log.
- Once a response has been determined for a complaint, the Grievance Focal Person should log this in the GRM log sheet, they should mark the complaint resolved, and they should draft a response letter to the complainant based on the standard letters.
- A copy of the letter shall be kept in the records with the original complaint form.
- Response letters shall be delivered back to complainants in a timely fashion.
- Each case shall be dealt with individually, and response provided as per standard number of days for feedback as indicated.
- Response letters can be delivered by the Grievance Focal Person.
- When complaints are referred to other offices, the GRM team to be established by MOH should send a letter back to the complainant explaining that the complaint was referred and including contact information for the person to whom the complaint was referred.
- For complaints where there is a contact phone number, a phone call may be used to deliver the initial response on the complaint (if there is a phone call available).

### **Step 5: Verification of corrective action**

- The aggrieved person will be asked to confirm their satisfaction with the corrective action.
- If the complainant is still dissatisfied, they may pursue formal legal processes.
- Courts shall be the last avenue for addressing grievances.
- The grievance will be closed out in the log.

#### **Step 6: Action by MOH/EPHI and project contractors**

- If the work supervisor cannot resolve the grievance, it will be referred to MOH/EPHI and the contractor through the supervising engineer.
- Grievance resolution strategies may include:
  - Discussing with the project affected parties
  - Determining reasonable compensation for damages or losses.
  - Signing agreements between affected parties and the project for mutually agreed solutions.
  - Ensuring contractors address grievances at the end of project work (e.g., paying compensation and issuing assurance letters).
  - Initiating monitoring to assess further impacts after addressing the initial problem.

#### **12.2 Gender-Based Violence (GBV) Related Grievance Redress**

- GBV-related grievances will be handled with strict confidentiality.
- Complaints will be reported to the facility manager, TBH Directorate, PIU coordinator, and immediate action will be taken consistent with the complainant's wishes, rights, and dignity.
- Complainants will be informed clearly about complaint procedures, possible outcomes, timelines, and available support.
- Access to complaint processes will be easy, confidential, and safe for the complainant/survivor.
- Incident recording will be limited to the nature of the complaint (in the complainant's words), the survivor's age, and, if known, the perpetrator's association with the project.
- The complainant will decide whether to be referred to the grievance committee and will give consent to share basic monitoring data.
- The survivor's safety and well-being will be prioritized throughout the process.
- Confidentiality of complainants, survivors, and other parties will be maintained.

- A survivor-centered approach will be followed, respecting the survivor's choices, needs, safety, and well-being.
- The mechanism will be accessible and non-discriminatory, with information provided on how to access it.
- Reports from third parties (witnesses, etc.) will also be accepted and follow accountability protocols.

### **12.3 Labor Related GRM**

- All project workers, individual contractors, and laborers working with contractors have the right to have their complaints addressed.
- The project will primarily involve Ethiopian workers, many of whom may be government civil servants subject to their existing employment terms.
- Anticipated labor-related risks include OHS issues, GBV, discrimination, and unequal opportunities.
- The contractor will establish a GRM for workplace which will handle employment-related conflicts and GBV cases.
- Project workers with complaints have the right to present them and obtain redress.
- The GRM will serve direct and contracted workers, and complaints can be received anonymously through a digital system or physical options like suggestion boxes.
- The redress process will follow similar procedures as other grievances, ensuring transparency, timely feedback in an understandable language, and operation in an independent and objective manner.

### **12.4 World Bank's Corporate Grievance Redress Service (GRS)**

- Project-affected parties and individuals can submit complaints to the World Bank's independent Inspection Panel.
- Complaints can be submitted after concerns have been brought to the World Bank's attention and management has had a chance to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit [Grievance Redress Service](#).
- Information on submitting complaints to the GRS and Inspection Panel is available at the provided websites.

## **Annex 11: Waste Transportation or Transfer (Adopted from EFDA Healthcare Waste Management Directive, 2005)**

**Onsite transportation of healthcare wastes shall be done in accordance with the following provisions:**

- a) Bags or bins shall be transported from the service point to storage, treatment and disposal area and a disinfected and clean trolley or wheel barrow shall be used for transporting safety boxes and bins;
- b) Employees safety shall be ensured by providing protective clothing or equipment and training;
- c) The collection route shall be the most direct one from the collection points to the central storage, disposal sites and off sight and waste routes within the facility shall be designated to avoid the passage of waste through patient care area;
- d) The collected waste shall not be left even temporarily, anywhere other than at the designated central storage or disposal site;
- e) Container shall be covered with lids, puncture proof and leak proof during transport;
- f) Carts and recyclable containers that are used repeatedly for transport and treatment of bagged waste shall be disinfected after each use;
- g) The international hazard sign shall be displayed on the vehicle or container, as well as an emergency telephone;
- h) Employees shall be properly trained in the handling, loading and unloading, transportation and disposal of healthcare wastes;
- i) Employees shall be fully aware of emergency procedures for dealing with accident and spillage;
- j) Yellow bags of hazardous healthcare waste and black bag of non-risk healthcare waste shall be collected on separate trolleys that shall be painted or marked with the corresponding colors and cleaned and disinfected regularly;
- k) When handling or transporting plastic bags of infectious waste, care shall be taken to prevent tearing the bags. Instead of chutes or dumbwaiters, carts shall be used for transporting bags of infectious waste within the facility;
- l) Waste shall be placed in rigid or semi rigid, leak proof containers before being loaded onto trucks;

- m) If transportation and disposal cannot be immediately ensured anatomical waste shall be stored in the mortuary.

**Offsite transportation of healthcare wastes shall be done in accordance with the following provisions:**

- a) Treated infectious wastes shall be transported in closed, leak-proof, rigid containers using trucks.
- b) The transportation shall be properly documented and all vehicles shall carry a consignment note from the point-of collection to disposal facilities.
- c) Vehicles used for the carriage of yellow bags shall be disinfected prior to use for next service.
- d) The vehicles and containers used for the transportation of healthcare wastes shall not be used for any other purpose be locked at all times, except when loading and unloading; be free of sharp edges, easy to load and unload by hand, easy to clean and disinfected or on the road during transportation; shall carry adequate supplies of plastic bags, protective clothing, cleaning tools and disinfectant and shall be marked with the name and address of the waste carrier;
- e) Separate arrangement of time shall be earmarked for transportation of bio-medical waste to reduce chances of its mixing with general waste.
- f) The transport shall be done through desiccated vehicles specially constructed for the purpose having fully enclosed body, lined internally with stainless steel or aluminum to provide smooth and impervious surface which can be cleaned with an internal body height of 2.2 meters.
- g) The driver's compartment or section shall be separated from the load compartment with bulkhead.

## **Annex 12: Operational Environmental and Social Management Plan (O-ESMP)**

The Operational Environmental and Social Management Plan (O-ESMP) guides the safe and responsible operation of the Health Isolation Center, focusing on environmental, social, occupational health, and community safety during routine and emergency activities. It ensures compliance with national laws and World Bank Operational Policies throughout the facility's operational phase. The plan aims to ensure safe operation, prevent healthcare-associated infections, manage waste and wastewater safely, protect health and safety of all stakeholders, establish institutional responsibilities, and maintain compliance with regulations and standards. The O-ESMP provides a structured framework to manage, monitor, and mitigate environmental, social, occupational health and safety (OHS), and community health and safety risks associated with the routine and emergency operation of the isolation center.

### **2. Objectives of the O-ESMP**

The objectives of this O-ESMP are to:

- Ensure safe, environmentally sound, and socially responsible operation of the isolation center
- Prevent and control healthcare-associated infections (HAIs)
- Ensure safe management of healthcare waste and wastewater
- Protect the health and safety of staff, patients, visitors, and surrounding communities
- Establish clear institutional responsibilities, monitoring, and reporting arrangements
- Ensure continued compliance with national regulations and World Bank Environmental and Social Standards (ESSs)

### **3. Scope of Application**

This O-ESMP covers all operational activities of the isolation center, including patient admission, isolation, treatment, and discharge; facility management and maintenance; Infection Prevention and Control (IPC); Healthcare waste and wastewater management; Occupational health and safety of staff; Community interface, risk communication, and grievance management; Emergency preparedness and response during disease outbreaks or accidents.

### **4. Policy, Legal, and Institutional Framework**

Operation of the isolation center shall comply with approved project ESMP and associated screening instruments; national public health, environmental, labor, and occupational safety laws; national Infection Prevention and Control (IPC) guidelines; World Bank Operational Policies; World Bank Group Environmental, Health and Safety (EHS) Guidelines for Healthcare Facilities.

## 5. Institutional Arrangements and Responsibilities

| Entity                           | Key Responsibilities During Operation                                 |
|----------------------------------|---|
| Implementing Agency (MoH / EPHI) | Overall oversight, regulatory compliance, reporting to the World Bank |
| Facility Management              | Day-to-day operational E&S management                                 |
| Medical Director / IPC Officer   | Infection prevention, patient safety, IPC compliance                  |
| Environmental Health Officer     | Waste, sanitation, and wastewater management                          |
| OHS Focal Person                 | Staff health and safety, incident reporting                           |
| Security and Access Control      | Visitor control, perimeter and community safety                       |
| GRM Focal Point                  | Management of grievances from patients, staff, and communities        |

## 6. Key Environmental and Social Risks During Operation

The primary E&S risks during operation include:

- **Healthcare-associated infections and disease transmission:** These risks involve the spread of infectious diseases within the facility, potentially affecting patients, staff, and visitors due to inadequate infection control practices or lapses in hygiene protocols.
- **Exposure of staff and waste handlers to infectious materials:** Staff and individuals handling medical waste may come into contact with contaminated items such as used PPE, sharps, or bodily fluids, leading to potential infection or injury if proper protective measures are not followed.
- **Improper segregation, storage, or disposal of healthcare waste:** Failure to correctly separate hazardous, infectious, and general waste can result in environmental contamination, increased risk of disease transmission, and regulatory non-compliance, especially if waste is stored or disposed of inappropriately.
- **Wastewater contamination and sanitation failures:** Malfunctioning drainage or sanitation systems may cause leaks, spills, or overflows of contaminated wastewater, potentially polluting local water sources and posing health risks to facility occupants and nearby communities.
- **Community exposure through visitors, transport, or waste handling:** Risks arise when infectious agents are inadvertently transferred outside the facility by visitors, during transport of patients or waste, or through improper handling, possibly leading to outbreaks in the surrounding community.
- **Occupational stress and psychosocial risks among health workers:** Health workers may experience mental health challenges, burnout, or stress due to high workloads, exposure to traumatic situations, and fear of infection, affecting their well-being and job performance.

## 7. Mitigation Measures and Operational Controls

| E&S risks                              | Mitigation Measures   |
|--|---|
| Infection Prevention and Control (IPC) | <ul style="list-style-type: none"> <li>• Implementation of strict patient triage and admission protocols</li> <li>• Zoning of the facility into clean, semi-contaminated, and contaminated areas</li> <li>• Mandatory use of appropriate PPE by all staff and visitors</li> <li>• Routine cleaning and disinfection schedules for all areas</li> <li>• Adequate ventilation and airflow control, as per facility design</li> </ul>                              |
| Healthcare Waste Management            | <ul style="list-style-type: none"> <li>• Segregation of waste at the point of generation using color-coded containers</li> <li>• Separate handling of infectious waste, sharps, pathological waste, and general waste</li> <li>• Secure interim storage with restricted access</li> <li>• On-site treatment (e.g. autoclaving) or off-site disposal through licensed service providers</li> <li>• Maintenance of waste tracking and disposal records</li> </ul> |
| Wastewater and Sanitation Management   | <ul style="list-style-type: none"> <li>• Safe handling of liquid waste generated from isolation wards and laboratories</li> <li>• Proper functioning of septic systems or sewer connections</li> <li>• Regular inspection and maintenance of drainage systems</li> <li>• Immediate response and containment of leaks, spills, or overflows</li> </ul>   |
| Occupational Health and Safety (OHS)   | <ul style="list-style-type: none"> <li>• Routine health screening and vaccination of staff as required</li> <li>• Availability of post-exposure prophylaxis and emergency medical response</li> <li>• Safe shift scheduling to minimize fatigue and burnout</li> <li>• Provision of psychosocial support and stress management measures</li> <li>• Incident, accident, and near-miss reporting and investigation</li> </ul>                                     |
| Community Health and Safety            | <ul style="list-style-type: none"> <li>• Controlled access to the facility and visitor management procedures</li> <li>• Risk communication and information disclosure to surrounding communities</li> <li>• Safe transportation of patients, samples, and medical supplies</li> <li>• Vector and pest control within the facility premises</li> <li>• Prohibition of informal access to waste or restricted areas</li> </ul>                                    |
| Labor and Working Conditions           | <ul style="list-style-type: none"> <li>• Compliance with national labor laws and employment standards</li> <li>• Written contracts and clear job descriptions for all staff</li> <li>• Enforcement of a Code of Conduct</li> <li>• Functional worker-specific grievance mechanism</li> </ul>  |
| Grievance Redress Mechanism (GRM)      | <ul style="list-style-type: none"> <li>• Receive and address grievances from patients, staff, visitors, and communities</li> <li>• Allow confidential and anonymous submissions</li> <li>• Ensure timely resolution and documentation of grievances</li> <li>• Escalate unresolved cases to higher institutional levels as required</li> </ul>  |

## 9. Emergency Preparedness and Response

The facility shall maintain and regularly update an Emergency Preparedness and Response Plan (EPRP) covering:

- Disease outbreak surge scenarios
- Fire safety and evacuation procedures
- Medical emergencies and occupational exposure incidents
- Coordination with local health authorities and emergency services
- Periodic drills and simulation exercises

## 10. Monitoring and Reporting

| Aspect                        | Frequency   | Responsible Party            |
|-------------------------------|-------------|------------------------------|
| IPC compliance audits         | Monthly     | IPC Officer                  |
| Healthcare waste inspections  | Weekly      | Environmental Health Officer |
| OHS incidents and near-misses | Continuous  | OHS Focal Person             |
| GRM performance               | Quarterly   | Facility Management          |
| E&S performance reporting     | Semi-annual | Implementing Agency          |

## 11. Capacity Building and Training

- Initial and refresher IPC and OHS training for all staff
- Specialized training for waste handlers and cleaners
- Emergency response drills and refresher sessions
- Induction training for new staff prior to deployment

## 12. Continuous Improvement and ESMP Linkage

Monitoring findings, incident reports, and grievance trends shall be used to:

- Implement corrective and preventive actions
- Improve operational procedures and protocols
- Inform ESMP closure reporting and long-term sustainability measures

## 13. Conclusion

This O-ESMP ensures that the Health Isolation Center operates in a manner that is environmentally sound, socially responsible, and aligned with national regulations and World Bank requirements. Compliance with this annex is mandatory throughout the operational life of the facility.

## **Annex 11: List of Experts Involved in the Preparation of the Environmental and Social Management Plan (ESMP)**

### **1. Mr. Yohannis Fetene (Senior Environmental Pollution and Environmental Health Expert)**

#### **Personal Profile**

- Full name: Yohannis Fetene (Ministry of Health - Ethiopia)
- Mailing address: feteneyohannis@yahoo.com
- Permanent address: AA, Ethiopia
- Mobile: +251-911-525075

### **2. Mr. Biruk Gobena (Senior Environmental Pollution and Environmental Health Expert)**

#### **Personal Profile**

- Full name: Biruk Gobena (Ethiopian Public Health Institute)
- Mailing address: gobenabiruk@yahoo.com
- Permanent address: Addis Ababa, Ethiopia
- Mobile: +251-912855633