

## Preparation of Asbestos Management Plan and Works Oversight

Sierra Leone

**Client: Ministry of Lands, Housing and Country Planning (MLHCP)**

Client Project number: SL-MLHCP-479012-CS-CQS

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### Phase 1

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# 1. Introduction

## 1.1. Context & Objectives

### 1.1.1. Context

The Government of Sierra Leone with support from the International Development Association (IDA) of the World Bank is implementing the Sierra Leone Land Administration Project (SLLAP) financed through a US\$ 41.1 million grant. The Project Development Objective (PDO) is to establish an efficient and accessible land administration system in Sierra Leone.

The SLLAP is implemented by MLHCP, which has established a Project Coordination Unit for the day-to-day implementation of the project and SLLAP is structured around five components:

- Component 1: Institutional Development and Legal Reform;
- Component 2: Development of land Information System;
- Component 3: Recording and Registration of Land Tenure Rights;
- Component 4: Project Management;
- Component 5: Contingency Emergency Response Component.

The implementation of the Component 1 includes the construction and operation of a four-story administrative building to house the National Land Commission (NLC) Head Quarter (HQ) in Freetown to enhance operational efficiency, client services, and overall functionality for land administration in the Western Areas of Sierra Leone.

### 1.1.2. Project site

The identified site for the construction of the new NLC HQ is located within a complex of government offices in New England, Freetown at the coordinates 694003.84;93716.00. The site, currently used by the survey wing of the Ministry of Lands and Country Planning, is of 0.3746 acres (1516sq. m) of land owned by the Ministry of Lands and Country planning and will require the **demolition of a single storey building**.

The site will house the four level 2088sq. m building and the planned ground level footprint of the structure is 511 sq.m.

To the immediate east is the Ministry of Social Welfare, and to the north is the new structure of 98.1 FM Radio station – Radio Democracy and an old structure used by the Ministry of Employment, Labour and Social Security (MELSS). To the immediate south, a paved road connects the surrounding areas as well as serves as a vehicular exit route from the New England Ville Complex. On the western side is an unfinished structure for the Environmental Protection Agency (EPA). The National Commission for Person's with Disability (NCPD) is also approximately 15 meters southwest of the proposed site.



The Asbestos Management Plan (AMP) is considered as a support document of the ESMP and must be prepared in line with the:

- World Bank's ESF;
- World Bank's Environmental Health and Safety Guidelines, including for waste management facilities;
- World Bank's Good Practice Notes (GPNs);
- World Bank's Technical Guidance Notes for Asbestos Management in World Bank Operations;
- and all appropriate current World Health Organization (WHO) document.

It has to be mentioned that the **WBG's EHS Guidelines specify that existing facilities with ACM** should develop an AMP that clearly identifies the locations where the ACM is present, its condition (e.g., whether it is in friable form or has the potential to release fibers), procedures for monitoring its condition, procedures to access the locations where ACM is present to avoid damage, and training of staff who can potentially come into contact with the material to avoid damage and prevent exposure. The plan should be made available to all persons involved in operations and maintenance activities.

In addition, reference to international convention will be done such as the International Labor Organization (ILO).

The AMP must also **be compliant with relevant laws and policies** of the Government of Sierra Leone.

## 2. Local regulatory context and international standards applicable

### 2.1. Main institutional actors

#### 2.1.1. Ministry of Lands, Housing and Country Planning

The Ministry of Lands, Housing and Country Planning (MLHCP) is mandated to effectively and sustainably manage and administer the most important natural asset of this country, the land resource, and to facilitate equitable access to and control over land within the context of food security, poverty alleviation, housing provision and economic growth.

The Ministry formulates appropriate policies/legislation on land management and administration that promote sustainable management of the environment, and effective land use planning.

The ultimate goal of the ministry, as reflected in its Mission Statement, is to administer effectual policies for land use which contribute to overall socio-economic development. These objectives are vital considering the issue of rural–urban migration and its attendant social, economic and political challenges.

For this Project, the MLHCP is the project developer and beneficiary.

#### 2.1.2. Sierra Leone Environment Protection Agency (EPA-SL)

The Environment Protection Agency was set up to replace the National Commission for Environment and Forestry (NaCEF), which was mandated to oversee issues pertaining to the environment and forestry.

The EPA-SL will ensure that the project meets and maintains the local requirements of ESMP. The Project ESMF, which has been prepared and disclosed require SLLAP to prepare site specific ESMPs for the NLC offices in compliance with terms and conditions of the EPA.

#### 2.1.3. Ministry of Works and Public Assets

The Ministry of Works and Public Assets is charged with the responsibility to design, co-ordinate and monitor the implementation of policies and programmes for the development of physical and social infrastructure (buildings, roads) and management of public assets.

#### 2.1.4. The Ministry of Employment, Labour and Social Security

The mandate of the Ministry is to develop and administer labour and social security regulations and policies, maintain cordial industrial relations among operatives in the labour market, ensure OHS in workplaces and provide social security. The activities of this Ministry are guided by the Employment Act, 2023.

#### 2.1.5. Freetown City Council

The 2016 Local Government Act stipulates that a local council shall be the highest political authority in the locality and shall have legislative and executive powers to be exercised in accordance with this Act or any other enactment. The Freetown City Council must be consulted during the implementation and planning process.

## 2.2. Local regulation

### 2.2.1. Environment Protection Agency Act, 2008, 2010, 2022

The Environmental Protection Agency (EPA) Act 2008 amended in 2022 is the government of Sierra Leone's overarching legislation that deals with the protection of the environment. The Environment Protection Agency was established with a Board of Directors set up as its governing body. Subject to this Act, the control and supervision of the Agency is the responsibility of the Board, whose administrative functions as stipulated by the EPA, 2008.

In the absence of any specific regulatory framework on asbestos management in Sierra Leone, the Environmental Protection Agency Act of 2022 (Act no. 15 of 2022), which supersedes the earlier versions of 2008 and 2010, is the core law that regulates "toxic or hazardous substances" and is the primary legal instrument for environmental protection. **The law stipulates that no one should discharge toxic or hazardous substances into the air, land, or waters of the country.** The EPA has the mandate to monitor, control, and regulate the handling, storage, transportation, and disposal of waste.

### 2.2.2. Asbestos Guideline (2024, Draft)

The main objective of these guidelines is to protect the environment and to minimize the potential risk associated with workers and the public from asbestos. EPA, in consultation with relevant Ministries and Agencies namely the Ministry of Health (MoH), Directorate of Environmental Health and Safety, National Public Health Agency, the Pharmacy Board of Sierra Leone, and the Freetown City Council developed these guidelines. The document is currently under review by the EPA, however a copy of the draft of the document was shared with the Project and the present AMP will strictly respect the stated guidelines.

**The guideline states that "the removal, handling, and disposal of asbestos shall not commence until the approval of the EMP and a permit is issued". The approval roadmap is presented in Chapter 2.4.**

### 2.2.3. National Public Health Act 2022

This document describes the legal actions that may be taken to prevent and control the outbreak of infectious disease in Sierra Leone.

The National Public Health Agency (NPHA) was established through the Public Health Act of 2022 (Act No. 17 of 2023), which replaced the 1960 Public Health Ordinance. The Act grants the agency full authority to lead national public health promotion, disease prevention and control, and emergency coordination, based on the One Health approach and community-driven action.

### 2.2.4. National Disaster Management Agency Act 2020

National Disaster Management Agency (NDMA), whose 2020 Act also confers on it the authority for managing environmental hazards and disasters, including unsafe building materials. The Act accords them the authority to carryout "risk assessment, prevention, safe disposal, and interagency coordination to protect public health and the environment".

**Should asbestos-contaminated wood or material be required to be transported off-site, the EPA and the NDMA are legally tasked with overseeing the safe transport to prevent community exposure. The vehicles used should be licensed for the transport of hazardous waste.**

### 2.2.5. National Environmental Policy of 1994

This National Environmental Policy seeks to achieve sustainable development in Sierra Leone through the implementation of sound environmental management systems which will encourage productivity and harmony between man and his environment

The key objective of the policy is to secure for all Sierra Leoneans a quality of environment that can adequately provide for their health and well-being.

Several of the sectoral policies highlighted in the policy are highlighted below:

- Air Quality and Noise;
- Working Environment (Occupational Health and Safety);
- Public Participation.

### 2.2.6. Factory Act No 3 of 1974

The main occupational safety law remains the Factory Act No 3 of 1974, which is enforced by the Directorate of Occupational Safety and Health under the Ministry of Employment, Labour and Social Security. **It addresses workers' health and safety but does not contain specific provisions on asbestos exposure limits or mandated procedures for asbestos handling.** The Act also details provisions for machine safety, safe working conditions, sanitary facilities, periodic inspections, factory registration, and guidelines for reporting injuries, accidents and industrial diseases.

### 2.2.7. Employment Act of 2023

The Employment Act of 2023 is the principal labour statute governing employment relationships in Sierra Leone. It establishes the rights and duties of employers and workers and sets basic employment standards. **The law provides key labour protections relevant to the current project, including prohibitions on discrimination on the basis of race, gender, pregnancy, or disability.** The Act covers the following matters: business; contract of employment or service; earnings; discrimination; employer; equal remuneration; national minimum wage; strike; trade dispute; violence and harassment; wage.

### 2.2.8. Child Rights Act, 2007

Part III of the Child Rights Act, 2007, addresses the Employment of Children. It stipulates that only persons aged 18 and above may engage in hazardous work, such as civil works.

## 2.3. International standards

### 2.3.1. World Bank Group

#### 2.3.1.1. World Bank Environmental & Social Standards

The planned intervention is expected to trigger the following Environmental and Social Standards (ESS) of the World Bank:

- **ESS1: Assessment and Management of Environmental and Social Risks and Impacts**  
ESS 1 is relevant because construction activities under the SLLAP are expected to cause some environment and social impacts through pollution, displacement or relocation of makeshift restaurants, soil erosion, waste generation, occupational and community health and safety issues, and livelihood that need to be assessed and mitigated.
- **ESS2: Labour and Working Conditions**  
The construction work will make use of direct workers, contracted workers, and community workers, thus making ESS 2 relevant to the project.

- **ESS3: Resource Efficiency and Pollution Prevention and Management**

The construction work will result in small and diverse sources of emissions, soil and water pollution as well as the generation of waste, thus making ESS 3 relevant to the SLLAP construction activities.

- **ESS4: Community Health**

The ESS 4 is relevant because it addresses the possible health and safety concerns for the nearby residents and the wider community resulting from the proposed construction activities of the SLLAP project. Additionally, there's a potential risk of increased gender-based violence due to an influx of workers at the construction site.

- **ESS10: Stakeholder Engagement and Information Disclosure**

This subproject will involve engaging various stakeholders during the design, planning, and implementation stages. ESS 10 (**Stakeholder Engagement and Information Disclosure**) will guide the SLLAP consultations and engagements. To comply with this standard, SLLAP has prepared a standalone Stakeholder Engagement Plan (SEP) and a Change Management Community Engagement and Communication Strategy

### **2.3.1.2. Good Practice Note: Asbestos: Occupational and Community Health Issues (May 2009)**

The purpose of this Good Practice Note is to increase the awareness of the health risks related to occupational asbestos exposure, provide a list of resources on international good practices available to minimize these risks, and present an overview of some of the available product alternatives on the market.

### **2.3.1.3. WBG's General Environmental, Health and Safety (EHS) Guidelines**

The WBG EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP).

**The guidelines recommends that existing facilities with asbestos containing materials (ACM) should develop an asbestos management plan that:**

- Clearly identifies the locations where the ACM is present, its condition (e.g., whether it is in friable form or has the potential to release fibers);
- Procedures for monitoring its condition;
- Procedures to access the locations where ACM is present to avoid damage, and training of staff who can potentially come into contact with the material to avoid damage and prevent exposure.

The plan should be made available to all persons involved in operations and maintenance activities. Repair or removal and disposal of existing ACM in buildings should be performed only by specially trained personnel following host country requirements or, if the country does not have its own requirements, internationally recognized procedures. Decommissioning sites may also pose a risk of exposure to asbestos that should be prevented by using specially trained personnel to identify and carefully remove asbestos insulation and structural building elements before dismantling or demolition.

### **2.3.1.1. Environmental, Health, and Safety Guidelines for Waste Management Facilities**

The EHS Guidelines for Waste Management cover facilities or projects dedicated to the management of municipal solid waste and industrial waste, including waste collection and transport; waste receipt, unloading, processing, and storage; landfill disposal; physico-chemical and biological treatment; and incineration projects.

### 2.3.2. International Labor Organization (ILO)

The International Labor Organization (ILO) established an Asbestos Convention (C162) in 1986 to promote national laws and regulations for the “prevention and control of, and protection of workers against, health hazards due to occupational exposure to asbestos.” The convention outlines aspects of best practice: Scope and Definitions, General Principles, Protective and Preventive Measures, Surveillance of the Working Environment, and Workers’ Health. Sierra Leone has not ratified the Convention.

Main ILO asbestos convention requirements on best practices are presented in section 6.2.1.

### 2.3.3. WHO

The World Health Assembly Resolution 58.22 on cancer prevention urges Member States to pay special attention to cancers for which avoidable exposure is a factor, including exposure to chemicals at the workplace and in the environment.

Eliminating asbestos-related diseases is particularly targeted at countries still using chrysotile asbestos, in addition to assistance in relation to exposures arising from historical use of all forms of asbestos.

WHO, in collaboration with the International Labour Organization and other intergovernmental organizations and civil society, works with countries towards elimination of asbestos-related diseases by:

- Recognizing that the most efficient way to eliminate asbestos-related diseases is to stop the use of all types of asbestos;
- Providing information about solutions for replacing asbestos with safer substitutes and developing economic and technological mechanisms to stimulate its replacement;
- Taking measures to prevent exposure to asbestos in place and during asbestos removal (abatement);
- Improving early diagnosis, treatment, and rehabilitation services for asbestos-related diseases;
- Establishing registries of people with past and/or current exposures to asbestos and organizing medical surveillance of exposed workers; and
- Providing information on the hazards associated with asbestos-containing materials and products, and by raising awareness that waste containing asbestos should be treated as hazardous waste.

### 2.3.4. Other regulations

Other international standards include:

- **Basel Convention** on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989): The Basel Convention lists asbestos (dust and fibres) as a waste stream that is controlled between parties to the convention (ratifying countries) with disposal the only end result of the transboundary movement.
- The **Rotterdam Convention** on the Prior Informed Consent Procedure for certain hazardous Chemicals and Pesticides (1998) in international trade provides Parties with a first line of defence against hazardous chemicals. It promotes international efforts to protect human health and the environment as well as enabling countries to decide if they want to import hazardous chemicals and pesticides listed in the Convention.
- **European Union:** Directive 2003/18/EC amending Council Directive 83/477/EEC on the Protection of Workers from the Risks Related to Exposure to Asbestos at Work (March 2003). Provides regulations including: worker protection, training and medical surveillance;

inspections for asbestos-containing materials; notification of asbestos work; air sampling; exposure limits.

## 2.4. Regulatory review and approval roadmap

The EPA has the mandate to monitor, control, and regulate the handling, storage, transportation, and disposal of waste. In that sense, the Present AMP will have to go through the following steps :

- **Submission of the Asbestos Management Plan (AMP):** The Asbestos Management Plan (AMP) should be submitted to EPA for review and approval. The submission shall include all relevant supporting documentation and clearly define the approach for asbestos identification, handling, removal, transport, storage, emergency response, occupational health and safety (OHS) measures, air monitoring, and final disposal of asbestos-containing materials (ACM)
- **EPA Review:** EPA will review the AMP to assess its compliance with national regulation and guidelines. The EPA will not issue specific environmental permit as these activities are considered part of the broader project ESMP, but the Agency reserves the right to issue additional conditions or request supplementary approvals where the scale, risk profile, or disposal method warrants further regulatory oversight. Final version of AMP will be prepared and submitted.
- **Pre-Works Inspection:** Prior to the commencement of asbestos-related works, the Project team shall notify the EPA sufficiently in advance to allow for potential participation in pre-works inspections, particularly where activities present significant environmental or public health risks. Where required, a joint inspection may be conducted by the EPA and relevant Project stakeholders to verify that:
  - The site installation complies with the approved AMP;
  - Safety measures, signage, and access controls are in place;
  - Decontamination of facilities and waste storage areas are properly installed;
  - Trained personnel and appropriate PPE are available.

Any non-compliance identified during this inspection shall be corrected prior to the start of works.

- **Final Completion Clearance and Close-Out:** Clearance will be granted based on verification that all ACM has been removed, handled, transported, and disposed of in accordance with the approved AMP and regulatory requirements. This process may include the submission and review of:
  - Air monitoring results;
  - Waste tracking and disposal documentation;
  - Incident and non-compliance records;
  - Remediation evidence, where applicable;
  - Independent verification reports, depending on the risk level.

In cases where works have been suspended due to an environmental incident, contamination event, or non-compliance, EPA clearance shall be obtained prior to the recommencement of activities.

The EPA may also require additional verification that the site has been rendered safe before re-opening, depending on inspection findings and risk considerations.

The site shall only be released for subsequent construction activities after formal clearance is issued by EPA.

On-site burial or encapsulation of asbestos-containing waste should not proceed without prior EPA review and written approval. A detailed technical justification and risk assessment will be required, covering site suitability, hydrogeological considerations, containment design, long-term monitoring arrangements, institutional controls, and alternative disposal options considered. The Agency will review such proposals on a case-by-case basis, in consultation with relevant institutions.

## 3. Asbestos diagnosis results

The asbestos diagnosis is part of the risk assessment. The purpose is to identify the location of Asbestos Containing Material (ACM) and gauge the condition of the material before the works. Results are presented in Appendix 1.

The asbestos survey was conducted the 25<sup>th</sup> February 2026 and included the following sampling program:

### Building: Main building

#### Sampling location:

- Sheet used for the roof
- Mastic used at the window
- Interior walls
- Interior roof
- Wood facade

### Building: Small sanitary building

#### Sampling location:

- Pipeline in fibro cement (1<sup>st</sup> discharging point)
- Mastic (1<sup>st</sup> discharging point)
- Pipeline in fibro cement (2<sup>nd</sup> discharging point)

### Building: Garden

#### Sampling location:

- Sheet in fibro cement used as barrier for the garden







Figure 2. Asbestos survey

A total of nine samples were collected and analysed by a laboratory accredited COFRAC.

The results underline the presence of asbestos in four samples.

Table 1. Asbestos -Containing Materials (ACMs) Register Table

ACM Type	Location			Friability	Physical condition	Likelihood of disturbance	Assigned risk level (high/medium /low)	Criteria used to conclude	Pictures
	Floor	Local	Element						
Pipe	Ground floor	Sanitary building First outing	Bac	Medium	Bad	Medium	Medium	Analysis	
Pipe	Ground floor	Sanitary building 2nd outing	Bac	Medium	Bad	Medium	Medium	Analysis	

Corrugated sheets	Ground floor	Garden	Plates	Low	Poor conditon	High	High	Analysis	
Corrugated sheets	Ground floor	Main building	Roofing and ridge	Medium	Poor conditon	High	High	Analysis	

The diagnosis report and analysis results are presented in **Annex 1**.

## 4. Risk assessment

Fibers of asbestos are invisible when suspended in airborne dust and can penetrate deep into the lungs. Once inhaled, they may cause a range of health effects, from non-malignant conditions such as pleural plaques to severe diseases including lung cancer, mesothelioma (pleural cancer), and fibrosis (asbestosis).

Importantly, even low levels of exposure may lead to disease, while repeated exposure significantly increases the likelihood of developing asbestos-related illnesses. These health effects are typically not immediate; they often occur many years after the initial exposure, and in some cases only appear after retirement.

For these reasons, removal and demolition activities involving asbestos-containing materials (ACMs) must be carried out with great caution.

### 4.1. Methodology

#### 4.1.1. Identification of risk

Risk identification takes into account both the intrinsic properties of the material and the context in which it may be disturbed. In that sense, it's based on the diagnosis for identification and characterization of ACMs (see Table 1. Asbestos -Containing Materials (ACMs) Register Table).

The following key parameters must systematically considered during risk identification:

- The physical characteristics of the material, including whether it is non-friable, protected friable, or friable;
- The condition of the ACM, including signs of deterioration, damage, or ageing;
- The likelihood of disturbance, considering accessibility, frequency of intervention, and operational constraints;

#### 4.1.2. Risk matrix

The asbestos risk assessment is based on a structured, semi-quantitative methodology which allows for consistent evaluation of risks associated with asbestos-containing materials (ACMs) and related activities.

The risk matrix is based on friability level and likelihood of disturbance level such as:

Table 2 : Risk assessment matrix

Friability/ Likelihood disturbance of	Low	Medium	High
Low	Low	Low	Medium
Medium	Low	Medium	High
High	Medium	High	High

### 4.1.3. Risk prioritization

The table below outlines the risk categorization framework applied to the total assessment score, supporting the prioritization of asbestos-related risks and the selection of proportionate mitigation measures.

Risk level	Description
<b>Low</b>	Low potential for fibre release and exposure under controlled conditions
<b>Medium</b>	Moderate risk requiring reinforced control and supervision measures
<b>High</b>	High likelihood of fibre release and exposure, requiring strict control measures and restricted access

### 4.1.4. Methodology for identification mitigation measures

The prioritization process ensures that resources and control measures are directed first toward situations presenting the highest potential for exposure. In particular:

- **High-risk situations** are prioritized for immediate action. These typically involve friable or degraded materials, significant disturbance, enclosed environments, prolonged exposure, and insufficient control measures. Such cases require strict controls, restricted access, and, where applicable, specialized removal or containment procedures.
- **Medium-risk situations** require planned and controlled interventions, including defined work methods, appropriate protective measures, and supervision to ensure that exposure remains within acceptable limits.
- **Low-risk situations** may be managed through routine monitoring, labelling, and controlled access, provided the material remains in good condition and is unlikely to be disturbed.

Priority is generally given to situations where several risk factors are combined, such as poor material condition, high friability, frequent or foreseeable disturbance, and work conducted in occupied or confined environments.

## 4.2. Project risk assessment

Table 3. Project asbestos risk assessment

ACM Type	Location			Friability	Physical condition	Likelihood of disturbance	Assigned risk level (high/medium/low)
	Floor	Local	Element				
Pipe	Ground floor	Sanitary building First outing	Bac	Medium	Bad	Medium	Medium
Pipe	Ground floor	Sanitary building 2nd outing	Bac	Medium	Bad	Medium	Medium
Corrugated sheets	Ground floor	Garden	Plates	Medium	Poor condition	High	High
Corrugated sheets	Ground floor	Main building	Roofing and ridge	Medium	Poor condition	High	High

## 5. Asbestos removal operating procedure

### 5.1. Roles of main actors

The implementation and oversight of the AMP will require the implication of the following main actors at the different stages of the project

#### **MLHC through the Project Coordination Unit (PCU) of the SLAPP:**

- Approve the Asbestos Management Plan;
- Obtain EPA approval of the AMP as an integral part of the broader project ESMP;
- Integrate the AMP into the Contractor tender in charge of the asbestos removal and storage;
- Evaluate the tenders and select the Contractor;
- Sign the contract with the Contractor;
- Coordinate with the Contractor and Supervising Consultant and any other contractor/sub-contractor engaged in the project;
- Oversight of the preparatory documents and works of the Supervising Consultant and Contractor.

#### **Supervising consultant:**

- Validate the preparatory documents prepared by the Contractor: Asbestos Work Plan;
- Train the workers in charge of asbestos removal and storage;
- Supervise the asbestos removal works and storage;
- Prepare work supervision report.

#### **Contractor:**

- Prepare preparatory documents: Asbestos Works Plan in line with the Asbestos Management Plan;
- Recruit workers and conduct asbestos removal works and storage including application of specific HSE measures detailed in the AMP;
- Prepare weekly work supervision report including report on HSE activities.

#### **EPA:**

- Approve the AMP considered as an integral part of the ESMP;
- Conduct pre-Works Inspection - prior to the commencement of asbestos-related works, the Project team shall notify the EPA sufficiently in advance to allow for potential participation in pre-works inspections
- Conduct on-site inspection during the asbestos removal works and storage to verify the good implementation of the AMP;
- Clearance will be granted based on verification that all ACM has been removed, handled, transported, and disposed of in accordance with the approved AMP and regulatory requirements, based on the final report of works supervision.

## 5.2. Qualified personnel

Personnel involved in the asbestos removal works must have been trained in asbestos removal procedures, be able to wear a mask, and be able to read and write.

Due to the site configuration, workers must also be trained and duly authorized to work at height and dedicated PPEs must be supplied by the Contractor.

In addition, each worker must have a medical certificate authorizing him to work.

## 5.3. Preparatory documents

The Contractor in charge of the works will need to prepare an Asbestos Works Plan prior to starting the activities based on the AMP and including at a minimum:

- EHS risk assessment;
- Standard Operating Procedures (SOPs);
- Waste Management Procedures;

The EHS risk assessment report should include but not be limited to the under-listed conditions:

- Type of asbestos present and the percentage;
- Friability of the material;
- Condition of the material (good, poor, etc.);
- Potential risk for occupant exposure;
- Other potential hazards (biological, chemical, electrical, confined spaces, heat, work at height, heavy material handling etc.);
- Risk rating or classification and rationale;
- Collective and Individual protective equipment to be used;
- Name of the person completing the risk assessment, signature, date, and phone number.

The Risk Assessment should only be conducted by qualified persons such as officers serving as Safety, Health, and Environment Managers, Property Managers, or an EPA-SL asbestos-accredited consultant. It has to be noted that this last information comes from the draft of the Guidelines and that no additional information is available regarding EPA-SL asbestos-accredited consultant list.

## 5.4. Works installation and safety

### 5.4.1. Preparatory phase

Before any work can be carried out, the building must be cleared of all furniture and occupants.

The preparatory phase refers to the entire phase of **installing airlocks**, water and air systems, put in place before the removal phase and related to asbestos works. It involves:

- Closing off access to the work area and affixing regulatory signage for the protection of surrounding communities;
- Receiving equipment arriving by truck;
- Unloading equipment at the work site;
- Verification of lockouts;

- Electrical and water lockouts;
- Validation of lockouts, issuance of lockout.

### 5.4.2. Site security

The work site must be closed with barriers or barrier tape. The access to the site must be delimited and controlled by the security personnel 24h/24h 7 days per week to prevent unauthorized persons from entering to the site and restrict movement.

### 5.4.3. Approach zone & decontamination chambers

The first stage of the asbestos removal project will involve setting up the **approach zone** and **decontamination chambers**. The decontamination chamber must be assembled and the shower system supplied with clean water. The shower water filtration pump must be connected to the shower trays. A discharge point for the filtered water must be selected. A power supply must also be available with several extension cords.

These installations may be placed in the lean-to located in front of the building to be decontaminated.

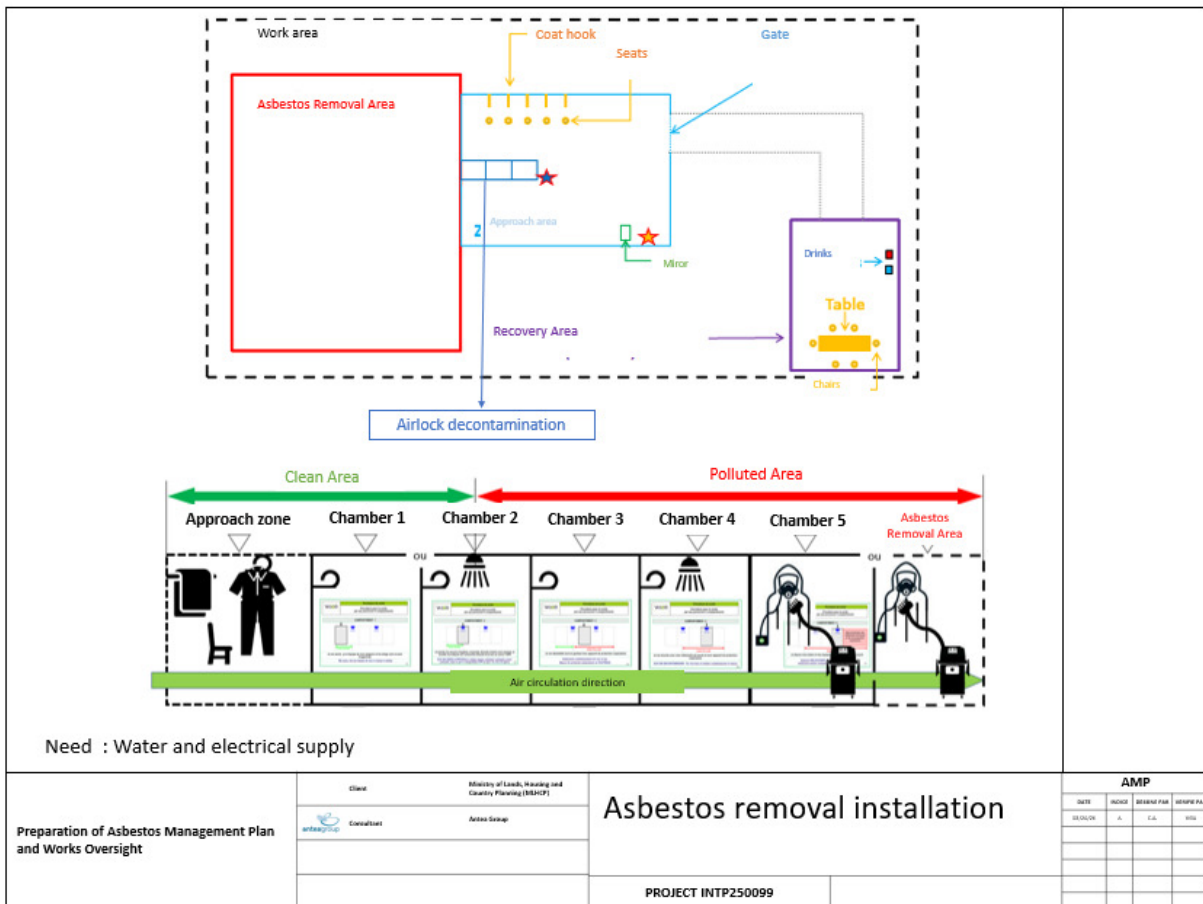


Figure 3. Installation of approach zone & decontamination chamber

An example of installation of approach zone and decontamination chambers is given below.




Preparation of Asbestos Management Plan and Works Oversight	Client	Ministry of Local, Housing and Country Planning (MLACP)	<b>Asbestos removal installation</b>	AMP			
	Consultant	Antea Group		DATE	REVISE	REVISION NO	ISSUE FOR
			PROJECT INTP250099	SANS ECHELLE			

Figure 4. Example of installation

### 5.4.1. Working & temporary waste storage area

A proposition of location of the working and storage area is presented below:



**LEGENDE :**

- Approach Zone
- Temporary waste storage Zone
- Working Zone

Preparation of Asbestos Management Plan and Works Oversight	Client	Ministry of Local, Housing and Country Planning (MLACP)	<b>Provisional installation plan</b>	AMP			
	Consultant	Antea Group		DATE	REVISE	REVISION NO	ISSUE FOR
			PROJECT INTP250099				

Figure 5. Provisional Installation Plan

The working zone represents the security buffer zone for which the access will be limited to workers.

## 5.5. Procedure of Dressing and undressing

### 5.5.1. Entry procedure

In the **approach zone**, after checking that the battery is working properly and that the mask and cartridges are in good condition:

1. The operator puts on their underwear and then their type 5 disposable suit with covered or welded seams and watertight seams.
2. If necessary, the operator puts on warm clothing in the approach area (if it has not been used in the zone).
3. He puts the suit on over his socks and then tapes the junction between the suit and socks.
4. He puts on his respiratory protection.
  1. For employees: APR according to the risk assessment in the **asbestos works plan** prepared by the Contractor.
  2. For visitors: Level 1: 1/2 mask with P3 filter. Level 2/3: according to the risk assessment in the asbestos works plan.
5. The hood of the suit is pulled over the straps of his respiratory protection and taped to it all around the edge.
6. The sleeves of the coverall are pulled over the cuffs of the gloves.
7. The cuffs of the coverall sleeves are taped to the cuffs of the gloves.
8. The operator puts on their boots or shoes if they have not been used in the area. Otherwise, they put on their flip-flops. They will then put on their boots or shoes in the work area.
9. For roof removal work from above, operators only use safety shoes (boots are not allowed on roofs).
10. The suit's zipper is covered with the suit's sticker.
11. If necessary, once in the withdrawal zone, the operator puts on warm clothing.

These steps are checked by the **airlock operator**.

After the checks have been carried out, the employee or visitor enters the work zone, and the airlock operator notes the time at which the employee or visitor put on their mask.

### 5.5.2. Check-out procedure

Table 4. Check out procedure

ZONE EXIT: PERSONNEL AIRLOCK with 1 shower for employees	
Decontamination airlock at the exit of the zone	<ul style="list-style-type: none"> <li>• If warm clothing is worn, it must be thoroughly dusted. It is then stored in a pre-decontamination area for reuse. Otherwise, it will be removed in accordance with the "decontamination procedure for materials and small equipment."</li> <li>• The operator dusts their work clothes using a vacuum cleaner with absolute filtration + brush; They will remove their belt and vacuum it and the coverall. Hard-to-reach areas will be vacuumed by their teammate.</li> <li>• Wetting the coverall using a spray bottle</li> </ul>

ZONE EXIT: PERSONNEL AIRLOCK with 1 shower for employees	
	<ul style="list-style-type: none"> <li>If compartment 3 of the decontamination chamber is not adjacent to the pre-decontamination area, put on a second overall</li> </ul>
<b>Operators follow the marked path to the entrance of the decontamination chamber.</b>	
<b>Compartment 3:</b> Removal of protective suit	<p>In compartment 3, the worker removes their boots/shoes and puts on their flip-flops, then removes their work clothes. When removing the coveralls, they are rolled up so that any dirt is enclosed inside. Underwear and coveralls are placed in the waste bag/transparent bag labeled "asbestos."</p> <p style="text-align: center;"><b>The worker keeps his respiratory protection on.</b></p> <p>At the end of each shift, the last operator to pass through the decontamination facility places his disposable clothing in the transparent bag labeled "asbestos" and closes it with a <b>goosneck</b>.</p>
<b>Compartment 2:</b> Body hygiene shower	<ul style="list-style-type: none"> <li>The operator showers from head to toe, paying particular attention to the mask straps and hair.</li> <li>He submerges the cartridges in water, then removes them and places them in the waste bag located in compartment 3, reaching through the door flap.</li> <li>They turn off their battery and then remove their respiratory protection. They clean their respiratory protection and hang it on the hook (paying particular attention to the gaps, edges, and handles).</li> <li>They shower with soap.</li> </ul> <p style="text-align: center;"><b>Shower duration: up to 5 minutes</b></p> <p>Notes:</p> <ul style="list-style-type: none"> <li>During the last shift of the day, the last operator to pass through the decontamination facility places their cartridges in a transparent bag, closes it with a swan neck seal, and then places it in compartment 3 by reaching through the door flap.</li> <li>This bag must be returned to the transparent PPE bag during the next shift.</li> <li>The cartridge change and APR decontamination checks are recorded in the <b>exposure dashboard by the airlock operator</b>. The shower time will be monitored by the airlock operator.</li> </ul>
<b>Compartment 1</b> <b>Or</b> <b>Approach zone:</b> Drying and re-dressing	<ul style="list-style-type: none"> <li>The worker dries off and puts on their bathrobe, then goes to the approach area/changing room to put on clean underwear and coveralls or their street clothes.</li> <li>They dry their mask, perform the daily checks, store it in the designated place, and put it on charge.</li> </ul>

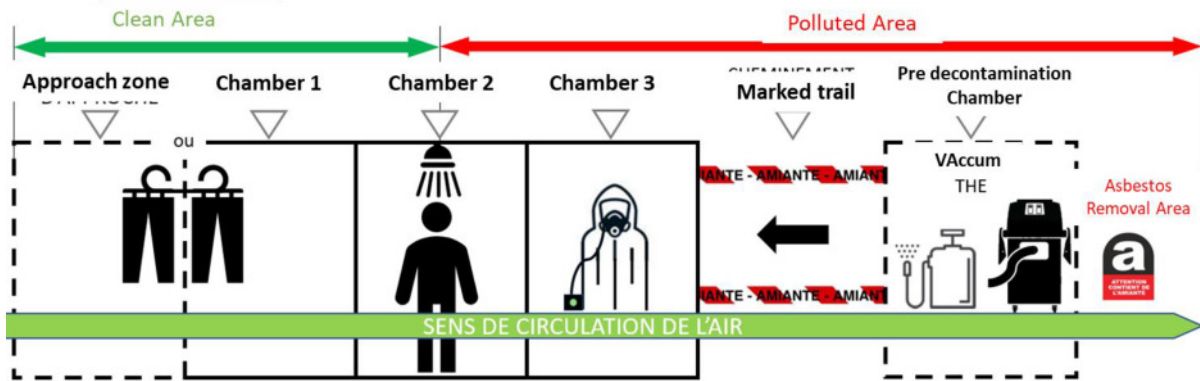


Figure 6. SAS procedure

### 5.5.3. Duty period

Operators will work by shifts, the duration of them will be adjusted according to the temperatures recorded in the area. There will be a minimum rest period of 30 minutes between two shifts:

Table 5. Duty period

Duty Period			
<b>Dressing phase</b> 15 min	<b>Withdrawal phase</b> 2 hours	<b>Undressing phase</b> 15 min	<b>Break</b> 30 min

The names of operators and the times they enter and leave the area will be recorded on an exposure log sheet provided in the site binder at the work site.

### 5.6. Procedure for decontaminating small equipment

Table 6. Small equipment decontamination

SMALL EQUIPMENT CHECK OUT: USE OF AN AIRLOCK 3 COMPARTMENTS	
<b>Compartment 3:</b> Dust removal	In the airlock approach area, the operator removes dust from the equipment using a HEPA filter vacuum cleaner. The equipment is placed in compartment 2. If it cannot be decontaminated, the operator places the equipment in bags or boxes and seals them hermetically (e.g., with a gooseneck seal).
<b>Compartment 2:</b> Decontamination shower	From compartment 2, an operator on duty collects the equipment or bag and showers thoroughly. Once cleaning and/or double packaging is complete, the operator places the equipment in the first compartment.
<b>Compartment 1</b>	From compartment 1, the external operator (or airlock man) removes the showered materials in compartment 2 and stores them.

## 5.7. Procedure for removing asbestos roofing

The work will be carried out by two teams of three on a rotating/shift basis. Each shift per team will last two and a half hours, including entry and check-out procedure.

The methodology for removing asbestos sheet used for roofing is described below.

- Prior vacuuming of surfaces with a THE vacuum cleaner;
- Protection of the floor with 200µ polyethylene wrap. Spraying of surfactant (water + adjuvant) on the underside of the plates at the anchor points;
- Moistening of asbestos-containing materials;
- If asbestos sheets should begin to crack or crumble, immediately wet the cracked or broken areas using a garden pump sprayer;
- Surfactant treatment of asbestos-containing elements at the edges of the sheets and fastening points;
- Remove pieces of asbestos sheets by pulling any fasteners (nails, screws, rivets) or cutting fastener heads to minimize breakage;
- Wet cleaning of supports and fastening points;
- In the event of accidental breakage of an asbestos cement element, the debris will be sprayed with a surfactant, particularly at the edges, in order to suppress any fibers that may have been released;
- Do not slide the asbestos sheets over each other;
- Carefully lower the removed asbestos sheets to the ground. Do not throw or drop it;
- Care should be taken not to stand or sit on the asbestos sheets to avoid breakage;
- Each asbestos sheet will be packed into 200µ polyethylene wrap;
- Asbestos sheet will be packaged as work progresses;
- All debris and dust will be carefully collected by vacuuming with a HEPA filter and wet wiping and packaged for disposal;
- Small equipment used for works will be cleaned by vacuuming with a HEPA filter;
- Visual self-inspection carried out by the Contractor.




 <p>Spraying of surfactant</p>	 <p>Lifting and sliding of the plate by operator</p>																																						
	 <p>Packaging and Storage of asbestos</p>																																						
<p>Preparation of Asbestos Management Plan and Works Oversight</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">Client</td> <td style="font-size: small;">Ministry of Lands, Housing and Country Planning (MLHCP)</td> </tr> <tr> <td style="font-size: small;">Consultant</td> <td style="font-size: small;">Antea Group</td> </tr> </table>	Client	Ministry of Lands, Housing and Country Planning (MLHCP)	Consultant	Antea Group	<p><b>Methodology for removing asbestos roofing</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4">AMP</th> </tr> <tr> <th style="font-size: x-small;">DATE</th> <th style="font-size: x-small;">INDEX</th> <th style="font-size: x-small;">DESCRIPTION</th> <th style="font-size: x-small;">VERSION</th> </tr> <tr> <td style="font-size: x-small;">02/05/20</td> <td style="font-size: x-small;">A</td> <td style="font-size: x-small;">C.A.</td> <td style="font-size: x-small;">001</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>	AMP				DATE	INDEX	DESCRIPTION	VERSION	02/05/20	A	C.A.	001																				
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Figure 7. Methodology for asbestos plates on the roof

## 5.8. Procedure for removing false ceiling

**Note:** as the roofing is bad conditions, there is a high risk to find asbestos dust on the false ceiling. As a consequence, we propose to consider the material as contaminated and managed it accordingly.

After removing the asbestos sheets, the cardboard false ceilings will be removed and placed in big bags.

Still wearing the specific PPE, the teams will carry out:

- Vacuuming and surfacing of the roof structures;
- False ceiling removal;
- Conditional in big bag;
- Vacuuming the floor and walls of the building.

After all asbestos removal operations, the traditional demolition of the building will take place.



Vacuuing and spraying of surfactant

Preparation of Asbestos Management Plan and Works Oversight	Client Ministry of Lands, Housing and Country Planning (MULCHP)	<h3>Frame treatment</h3>	AMP			
	Consultant Antea Group					
		PROJECT INT250099				

Figure 8. Vacuuming and surfacing of the roof structures

## 5.9. Procedure for removing pipe

The methodology is described as follow:

- Spraying of surfactant (water + adjuvant) on the concrete pipe;
- Chisel away the concrete around the pipe;
- Spraying of surfactant (water + adjuvant) on the pipe;
- Remove the pipe containing asbestos;
- Wrap it in 200µ polyethylene.

Spraying of surfactant (water + adjuvant) concrete

Chisel away the concrete around the pipe

Spraying of surfactant (water + adjuvant) pipe

Remove the pipe

Preparation of Asbestos Management Plan and Works Oversight	Client	Ministry of Land, Housing and Country Planning (MURP)	<b>PIPES</b>	<b>AMP</b>			
	Consultant	Antea Group		DATE	INDEX	ISSUED FOR	VERSION
			PROJECT INTP250099	02/2024	A	E.A.	V04

Figure 9. Pipes Methodology

## 5.10. Vacuum cleaners: replacement of bags, prefilters, and filters

Procedures described below apply only for Numatic or Ronda vacuum cleaners:

### Changing the bag:

1. Stand near the extractor (with the vacuum cleaner positioned between the extractor and people);
2. Prepare the asbestos waste bag and the new vacuum cleaner bag;
3. With the vacuum cleaner switched on, gently open the vacuum cleaner and spray towards the dust bag;
4. Close the dust bag and remove it from the vacuum cleaner;
5. Turn off the vacuum cleaner and place the vacuum cleaner head on the plastic sheet previously laid on the floor;
6. Place the dust bag in the asbestos waste bag;
7. Insert a new vacuum cleaner bag;
8. Replace the head.

### Changing the pre-filter:

1. Disconnect the hose and place the dust cap on the hose connection collar;
2. Release the two lower fastening tabs;

3. Open and spray at the same time;
4. Place the vacuum cleaner head on a plastic sheet on the floor;
5. Remove the fabric filter located in the tank.

#### Changing the HEPA filter:

1. Disconnect the hose and place the dust cap on the hose connection collar;
2. Stand close to the extractor (with the vacuum cleaner between the extractor and people);
3. Open the vacuum cleaner and remove the motor unit;
4. Remove the used THE filter and place it in a waste bag. It will be removed from the area following the waste removal procedure;
5. Install a new THE filter and close the vacuum cleaner;
6. Decontaminate all equipment following the equipment removal procedure;
7. Perform a DOP TEST to ensure proper filtration of the HEPA filter.

## 5.11. Procedure for Asbestos waste management

### 5.11.1. Classification of asbestos waste

Asbestos waste is considered as hazardous waste due to the risk of release of airborne asbestos fibers and can be divided into two categories:

- Friable asbestos waste (damage pipe insulation for example);
- Non-friable waste (asbestos cement sheet for example).

In addition, contaminated debris and secondary waste (including PPEs) are also considered as hazardous waste and should be treated accordingly.

### 5.11.2. Estimation of asbestos waste

Different types of asbestos waste will be generated during the asbestos removal operation:

- Roofing sheets packaged in polyethylene bags;
- Cardboard false ceilings packaged in big bags;
- Pipes packaged in big bags;
- PPE/airlocks/vacuum bags packaged in big bags.

Based on the observations made during the site visit, the estimated volume of asbestos waste is estimated as follows:

**Table 7. Asbestos waste volume estimation**

Waste Type	Numbers	Length (m)	Width (m)	Surface (m <sup>2</sup> )	Total Height (m)	Total Volume (m <sup>3</sup> )
Plates n°1	208	3	1,1	686,4	1,76	6,00
Plates n°2	104	1,5	1,1	171,6	0,93	2,00
Ridge	39	1,2	0,5		0,2	5
False ceiling				260		7,00

Waste Type	Numbers	Length (m)	Width (m)	Surface (m2)	Total Height (m)	Total Volume (m3)
Pipe	2	1				0,2
PPE						2

The total estimated volume of asbestos waste is 22.2 m<sup>3</sup>.

### 5.11.3. Collection and packaging

Due to their potential health risk, the following procedure will need to be strictly followed while collected and packaging asbestos waste:

**Procedure for loose asbestos (dust/airborne) and protective equipment (polyethylene/polyasim), filters, cartridges, and PPE:**

1. Wet the MCA and place it in an asbestos waste bag;
2. Seal with orange tape;
3. Shower the bag (in the decontamination chamber) and place it in a sealed package with tape;
4. Close the bag by making a gooseneck.



**Care should be taken to ensure that sharp pieces do not puncher the bags/ wrappers**

**Procedure for non-friable asbestos (sheet, false ceiling, pipe):**

1. Wet the ACM and wrap it in plastic film in batches;
2. Place on a suitable pallet that is sturdy and larger than the waste;
3. Wrap the entire package in plastic film to seal it, then strap it;
4. Label it as asbestos waste.



At the end of the works, the airlock will be folded up and placed in a big bag.

### 5.11.4. Waste temporary storage

The asbestos waste will need to be temporarily stored on site so that the building can be demolished.

The asbestos waste will need to be stored on wood pallet to isolate them from the ground and UV protection in the form of a geomembrane will be installed to entirely cover the waste stored.

The temporary storage area will need to be secured to prevent theft and reuse of this waste. Security guards will need to secure the area until this temporary storage area is cleared.

Signage on the type of waste stored and related risk and contact in case of emergency will need to be displayed at the storage site.

The duration for temporary storage of asbestos waste should not exceed thirty (30) days from the time of removal.



Figure 10. Example of temporary storage of asbestos waste

## 5.11.5. Final disposal

### 5.11.5.1. Potential solutions

The main objective of the final disposal of asbestos waste is to avoid airborne dust dispersion.

The following table presents different options of final disposal with their respective advantages and disadvantages.

Table 8. Different options of final disposal

Solution for final disposal of asbestos waste	Advantages	Disadvantages
<b>Sealed dry container</b>	Condition of storage controlled Visual inspection possible	Transition solution before a dedicated storage site open at the national level → duration of the storage uncontrolled
<b>Chemical inerting with a specialized company</b>	Break down the harmful properties of asbestos	No specialized company in Sierra Leone Require transboundary waste transport with high cost and long administration process
<b>Thermic inerting with a specialized company</b>	Break down the harmful properties of asbestos	No specialized company in Sierra Leone Require transboundary waste transport with high cost and long administration process
<b>Dedicated cell in controlled landfill</b>	Condition of storage controlled	No controlled landfill and dedicated cell for asbestos waste in Sierra Leone → uncontrolled timeline for the design and construction of a dedicated cell – also a specific site with land clearance must be identified

Solution for final disposal of asbestos waste	Advantages	Disadvantages
		Require transboundary waste transport with high cost and long administration process
<b>On-site concrete sarcophagi</b> (slab walls and bottom and cover slab)	Avoid asbestos waste transport Condition of storage controlled	Only used for the asbestos waste of the project  Need to keep the information available on the exact location and content of the sarcophagy

Based on the current local capacity on hazardous waste management and feedback from main stakeholders, including the EPA, the final storage of asbestos waste in a concrete sarcophagus can be considered, as proposed by the Client, and located under the construction of future buildings.

It is recommended that this storage is built outside the building's foundations in order to avoid any structural risk to the building. The depth of the sarcophagi shall be as deep as practically possible to accommodate asbestos waste as much as possible but at least one (1) metre above the water table. One or more concrete sarcophagi can be built, depending on the available space and retained scenario (under the building or outside).



Figure 11. Concrete sarcophagus designed for the safe final storage

However, it is essential that the information related to the location and content of the sarcophagi is preserved for the future. Indeed, if the new building must be demolished, precautions will have to be taken to avoid damaging the stored asbestos waste.

Based on the Geotechnical report prepared by Realini Bader Associates Limited the 4<sup>th</sup> June 2026, **Groundwater was not encountered in any of the test pits (up to 6 feet depth)**. However, fluctuations in groundwater or perched water levels should be expected with variations in factors such as precipitation, surface run-off, construction activity, etc.

#### 5.11.5.2. Waste handling procedure

Waste handling for filling the sarcophagus will be carried out using PPE specifically designed for asbestos works and the following steps should be followed to transfer asbestos waste into the sarcophagi:

1. Place a double-layer 200 $\mu$  polyethylene sheet at the bottom of the concrete cell;
2. Dispose all available asbestos waste into the concrete cell;
3. Once the concrete cell is full, cover it with 200 $\mu$  polythene sheet and fill the concrete cell with a layer of soil up to the top level of the concrete cell;
4. Fold the polyethylene sheets over the top and place 'asbestos' signage at the top before sealing. In case the cell/sarcophagi is not buried, signage must be placed on the walls;
5. Close the cell with a concrete slab.

The top of the cell must be at least at 1 meter below the ground level.



**Figure 12. Storage good practices**

The polyethylene film to be installed is highly resistant to pressure, tearing (thickness 200 $\mu$ ), and weather conditions (wind, dust, rain, sunlight, etc.), and has a lifespan of between 7 and 8 years. Its mechanical properties (elongation, tensile strength) make it waterproof at all stages of waste handling, ensuring the safety of work areas and the route to the final disposal site (cell).

The location, dimensions and content of the sarcophagi will be defined by the Contractor and need to be documented in the drawing of the new building.

## 6. Key E&S safeguards issues and specific procedures

### 6.1. HSE risk assessment

SLLAP's environmental and social (E&S) risk classification is **Substantial** and some of the Key environmental risks associated with the construction and operationalization of the NLC Headquarters in Freetown were identified in the Project ESMP, they are presented hereafter:

- (i) Risks of exposure to airborne asbestos fibers (see diagnosis in section 3 and see measures in section 6.1.7 in ESMP);
- (ii) Air quality deterioration (see measures in section 6.1.3 in ESMP);
- (iii) Occupational health and safety of workforce (injuries due to equipment, high noise, fallen trees, lack of safe drinking water and sanitation facilities, etc.) - (see measures in section 6.1.12 in ESMP);
- (iv) Noise pollution (see measures in section 6.1.4 in ESMP);
- (v) Soil pollution (see measures in section 6.1.10 in ESMP);
- (vi) Health and safety concerns for nearby communities, offices, petty traders, gardeners, clients, passers-by, visitors, pedestrians, other users - (see measures in section 6.1.14 in ESMP);
- (vii) Labour and working conditions risks (late payment, discrimination, violation of human rights, child and forced labour, gender based violences, harassment, etc.) (see measures in section 6.1.13 in ESMP).

As indicated, most of related measures are presented in the Project's ESMP.

For community protection, the intervention site must be closed with barriers or barrier tape. The access to the site must be delimited and prohibited for the security.

### 6.2. Additional specific HSE procedures for occupational health & safety risks

#### 6.2.1. Main requirements for protection of workers

The methodology for asbestos removal already provided measures for workers protection. Indeed, main ILO asbestos convention requirements are the following:

- Work clothing to be provided by employers (see section 0);
- Double changing rooms and wash facilities to prevent dust from going home on street clothes (see section 5.5);
- Training of workers about the health hazards to themselves and their families (see section 8.1);
- Periodic medical examinations of workers (see section **Erreur ! Source du renvoi introuvable.**);
- Periodic air monitoring of the work environment, with records retained for 30 years (see section 6.3);
- Development of a **work plan** prior to demolition work, to protect workers and provide for proper waste disposal (see sections 0 and 5.11); and
- Protection from "retaliatory and disciplinary measures" of workers who remove themselves from work that they are justified in believing presents a serious danger to health (see section 0).

In order to reduce the duration and level of exposure of workers to the lowest level technically possible and to ensure that there is no pollution in the environment in which the operations are carried out (buildings, equipment, structures, installations, etc.), it will be necessary to implement:

- Techniques and operating procedures to reduce dust (dismantling elements while limiting cutting) and reduce the volatility of asbestos fibres (impregnating materials containing asbestos with wetting agents);
- The necessary measures to contain and limit the spread of asbestos fibres outside the area of operations, in particular by providing workers with appropriate decontamination equipment and defining the decontamination procedure to be implemented (see all measures developed in section 4).

The Contractor will develop a notice for each workstation or work situation exposing workers to asbestos to be informed about the potential health risks associated with asbestos and the measures taken to avoid them. This notice shall include the following sections, based on this AMP:

- The characteristics of the asbestos, if known (type, quantity);
- A description of the process and its main parameters;
- The duration of exposure and any time constraints to be observed;
- The known and expected dust levels based on available data;
- Preventive measures and personal protective equipment.

Additional measures are detailed in the following section.

### **6.2.2. Organization of work**

Taking into account working conditions in terms of thermal or hygrometric constraints, postures and effort required for each task will enable the following to be determined:

- The duration of each shift;
- The number of daily shifts;
- The time required for workers to get dressed, undressed and decontaminated in the facilities provided for this purpose;
- The break time scheduled after each shift, in addition to the statutory break time.

All appropriate measures must be taken to ensure that the area dedicated to the operation is marked and inaccessible to persons other than those who, due to their work or position, are required to enter it.

Collective protection equipment are presented in section 0.

Waste management is described in section 5.11.

### **6.2.3. PPEs**









Depending on dust levels, personal protective equipment suitable for the operations to be carried out and ensuring compliance with occupational exposure limits will be made available to workers.


Respiratory protective equipment will consist of either NIOSH-approved half-mask respirators equipped with P100 (HEPA-equivalent) filters, or EN 140 compliant half masks fitted with P3 filters providing equivalent filtration efficiency ( $\geq 99.95\%$ ), subject to fit testing and inclusion in a formal respiratory protection program.

All PPEs must align with GIIIP and WHO standards.

PPEs required are:

Table 9. Required PPEs

Objective	Suggested PPE	Comment	Photos	Specific reference when relevant
Eye and face protection	Goggles			
Foot protection	Rubber Boots	1 per person		
Hand protection	Rubber Gloves	1 pair per shift		
	Handling gloves	2 per people		
Respiratory protection	Respirator with HEPA filters and half mask			AVIVA 40 half mask size S SCOTT (EN 140 compliant)
	Filters	2 cartridges per shift (in France, 3 shifts of 2 hours per day)		PRO2000 PF10P3 ( P3 level protection, in accordance with EN 143)
Body	Disposable coverall Disposable underwear	1 per shift for each		EPICOVER white Type 5/6 SMS suits
	Tape			
Fall risk management	Temporary fall arrest lifeline 2-point fall arrest harness Single fall arrest lanyard			TEMPO 3 temporary fall arrest lifeline - 18 m HT55A X-PAD 2-point fall arrest harness - M

Objective	Suggested PPE	Comment	Photos	Specific reference when relevant
				

The maintenance and replacement of collective protection measures and personal protective equipment shall be ensured in such a way as to guarantee the lowest possible level of dust throughout the operation and, in any event, in accordance with that indicated in the risk assessment.

The signage in the work area indicates, in particular, the estimated dust level of the operations carried out and the mandatory personal protective equipment.

#### 6.2.4. Management of work at height

Measures must include, at a minimum:

- Define the working spaces to which it applies;
- Installation a lifeline and plates on the roof in order to be able to move around safely. Operators who need to move around on the roof must be equipped with fall arrest harnesses attached to the lifeline;
- Specify when the weather conditions are likely to compromise employee safety and state the prohibition of working at heights in these conditions;
- Detail on training workers on how to wear safety harnesses and require them to attach them to a solid anchor point when climbing to heights;
- Specify the personal protective equipment that must be used and reiterate the obligation to use and report defective equipment including reflective harnesses;
- Specify the signage and layout of the work area: mark out the area where work is being carried out at height to avoid the risk of falling on people on the ground;
- All equipment must be used in accordance with the manufacturers' instructions for use and to carry out specific initial and periodic checks;
- State the prohibition for alone workers from working at heights in any situation;
- Specify measure for when equipment is used to access workstations, state that particular attention must be paid to positioning: flatness and load-bearing capacity of the seat, risk of slipping and need for slinging, suitability of the size of the equipment for the height to be crossed;
- Specify the emergency and rescue procedure as well as medical and occupational health monitoring for employees.




 <p><u>harness</u></p>	 <p>Asbestos <u>specific</u> Equipment</p>	 <p>Plates on the roof</p>																										
<p>Preparation of Asbestos Management Plan and Works Oversight</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; font-size: small;">Client: Ministry of Lands, Housing and Country Planning (MLHCP)</td> <td style="width: 50%;"></td> </tr> <tr> <td style="font-size: small;">Consultant: Antea Group</td> <td style="text-align: center; font-size: large;"><b>Safety PPE</b></td> </tr> <tr> <td style="text-align: center; font-size: small;">PROJECT INTP250099</td> <td style="text-align: center; font-size: small;">SANS ECHELLE</td> </tr> </table>	Client: Ministry of Lands, Housing and Country Planning (MLHCP)		Consultant: Antea Group	<b>Safety PPE</b>	PROJECT INTP250099	SANS ECHELLE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: center; font-size: small;">AMP</th> </tr> <tr> <th style="font-size: x-small;">DATE</th> <th style="font-size: x-small;">ISSUE</th> <th style="font-size: x-small;">ISSUE FOR</th> <th style="font-size: x-small;">ISSUE FOR</th> </tr> <tr> <td style="font-size: x-small;">01/01/2024</td> <td style="font-size: x-small;">A</td> <td style="font-size: x-small;">L.A</td> <td style="font-size: x-small;">V01</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	AMP				DATE	ISSUE	ISSUE FOR	ISSUE FOR	01/01/2024	A	L.A	V01								
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Figure 13. Safety PPE required

### 6.2.5. Right of withdrawal

The worker must inform his direction as soon as possible and no sanctions may be taken against them (except in the case of an unreasonable exercise of the right of withdrawal).

In this case, the following measures apply:

- The worker considers the work to be dangerous;
- The worker must ensure that the work/activity is left or placed in a safe condition and that they remain in a safe place. The worker immediately reports their refusal to their line manager;
- An investigation is launched into the problem to identify the causes and propose corrective measures;
- These measures are implemented and the worker agrees to resume work if the conditions appear safe to them;
- Appropriate monitoring and documentation of the situation must be put in place.

Despite this procedure, if the worker feels that their concerns have not been addressed, the situation must be reported to the health and safety representative and the HSE manager, as appropriate, and additional corrective measures must be implemented.

The work stoppage must be reviewed by the HSE manager to verify the quality of the intervention, ensure that corrective measures have been implemented, and that lessons learned have been shared.

### 6.2.6. Health monitoring

According to the Project’s ESMP, the Contractor shall hire fit and healthy workers, ensure their safety and health, and confirm no harm caused at the end of the project.

The hiring of a worker is conditioned to the result of his pre-employment medical examination prior to hiring, which must certify that the candidate is physically suitable for the job for which he is applying. Unfit workers must not be employed.

All newly recruited staff members undergo a medical examination, carried out by a doctor or nurse qualified in this regard, prior to their mobilization on the construction site in order to check their fitness for work. It is sanctioned by a written medical certificate of fitness for the work planned for the worker.

Since workers will be exposed to hazardous products, a specific medical check-up must be set up associated to a follow-up of the workers' health, the frequency of which is based on the different risk exposure groups. This includes the monitoring to the exposition of asbestos (see section below).

### 6.3. Air quality monitoring

During the asbestos removal works, environmental air quality monitoring will be conducted. Samples will be taken using air pump and adapted filters. The sample location will be chosen in order to be representative of the site and a sampling sheet with pictures will describe the surrounding of the sampling point.

During the asbestos waste removal works, one sample per week will be taken and the sample duration will be 24 hours. The sample analysis will be done in a specialized laboratory in Europe.

In the absence of specific regulatory exposure limits for environmental asbestos concentrations in Sierra Leone, the monitoring approach will be aligned with Good International Industry Practice (GIIP), including:

- World Bank Group Environmental, Health and Safety (EHS) Guidelines;
- World Health Organization (WHO) recommendations on asbestos exposure prevention.

The WBG EHS Guidelines and WHO emphasize that there is no safe level of asbestos exposure and recommend minimizing airborne fiber concentrations to the lowest feasible level.

For operational purposes, a conservative target value of 5 fibers per liter (5 f/L) is adopted as a reference threshold for environmental monitoring. This value is derived from established international practices (e.g., French Public Health Code) and is considered to be:

- Stringent and protective of public health;
- Consistent with international precautionary principles;
- Suitable as a practical benchmark for asbestos removal projects in the absence of locally defined standards.

This threshold is not intended to replace international guidelines but to provide an operational control level to trigger corrective actions where necessary.

If monitoring results exceed this reference value:

- Immediate investigation shall be conducted;
- Work practices will be reviewed and adjusted;
- Additional containment, wetting, or access control measures will be implemented.

All monitoring results will be documented and included in the final asbestos removal report.

Fiber concentration threshold for site reopening must be 0f/ml or equivalent, using samples taken using air pump and adapted filters.

In addition, as detailed in section 2.4, where works are suspended due to an environmental emergency, contamination incident, or non-compliance issue, EPA clearance may be required before

recommencement of activities. The verification that the site has been rendered safe shall be primarily based on air monitoring results, including air clearance measurements where applicable, supported by incident reports, remediation evidence, and independent verification as required by the EPA, depending on the level of risk.

## **6.4. Notification System for Disturbance of ACM**

### **6.4.1. Permit-to-Work requirement for all ACM-related activities**

A specific Permit to Work (PTW) must be completed for any activity that may disturb ACMs. No such activity shall commence unless risk assessment has been completed and the required preventive and protective measures have been confirmed as being in place by supervisor.

The PTW shall be issued only by an authorized person designated by the Contractor. At a minimum, the permit shall identify: (a) the exact work location; (b) the ACM concerned or the basis for suspecting its presence; (c) the scope of work; (d) the applicable asbestos risk level; (e) the approved method of work based on this AMP; (f) required containment, PPE and safety measures; (g) waste handling arrangements; (h) air monitoring requirements where applicable; and (i) the validity period of the permit. The PTW shall be displayed at the work area for the duration of the activity and closed only after the work area has been inspected and released by the authorized signatories.

### **6.4.2. Mandatory sign-off prior to disturbance of any ACM**

This sign-off is intended to provide a final authorization checkpoint confirming that the activity is safe to proceed under controlled conditions. As a minimum, the sign-off shall confirm that: the asbestos risk assessment sheet has been completed, workers are medically cleared as required; the work area has been isolated and signposted; appropriate PPE and decontamination arrangements are available; and emergency arrangements have been communicated to all affected personnel.

This sign off can take a form of a checklist to be completed to make sure all measures allow workers safety (PPE, decontamination area, signage, etc.).

### **6.4.3. Emergency stop-work procedure**

A clear emergency stop-work procedure shall apply to all asbestos-related activities. Any worker, supervisor, HSE officer, engineer, or other authorized site representative shall have the authority and obligation to stop work immediately where: (a) previously unidentified or suspect ACM is discovered; (b) the PTW conditions are not met; (c) required controls fail or are absent; (d) containment is breached; (e) an exposure incident occurs; or (g) site conditions change such that the approved method statement is no longer valid.

When stop-work is triggered, the area shall be made safe immediately by suspending the activity, isolating the affected zone, preventing unauthorized access, maintaining or re-establishing containment where feasible, and informing the responsible supervisor and HSE function without delay. Work shall not resume until the situation has been assessed by the competent person, additional risk controls have been defined and implemented, and a revised authorization has been issued through the PTW system. Where relevant, the ACM Register, risk assessment, method statement, and monitoring arrangements shall be updated before restart.

### **6.4.4. Incident notification protocol**

Any asbestos-related incident or accident include, at minimum: uncontrolled disturbance of ACM; unplanned fibre release; breach of containment; worker exposure requiring medical evaluation or PPE failure; transport or waste handling incidents; serious non-compliance with asbestos control measures; and discovery of previously unidentified ACM resulting in material change to project risks.

The Project's ESMP indicates that emergency telephone numbers, such as those for the ambulance and fire department, should be adequately and prominently displayed.

The Contractor should recruit an occupational safety, health and environment officer to manage, document and report all health, safety, and environment protection issues (incidents and accidents) on site.

In case of incident or accident, workers will have to alarm this OSHE officer. The Project Contractor shall notify the PCU immediately, and the PCU shall ensure onward notification to the World Bank and the EPA, as applicable, in line with project commitments and statutory obligations.

The initial notice shall contain the available facts at the time, including the nature of the incident, date and time, location, affected persons, immediate consequences, measures taken to secure the area, and proposed next steps. An incident review shall then be undertaken to identify the immediate, underlying, and root causes, and a Corrective Action Plan shall be prepared and implemented to address the event and prevent recurrence.

For internal project control, the following notification sequence shall apply:(1) immediate verbal notification to the Site Supervisor and HSE Officer;(2) notification to the Project Manager and Contractor HSE Manager;(3) immediate notification to the PCU;(4) formal initial incident notification to the World Bank within 48 hours through the agreed project channel; and(5) notification to the EPA and any other competent authority where required by permit, law, or project-specific commitments. All incidents, near misses, stop-work events, and corrective actions shall be recorded in the project incident log and referenced in regular ESHS reporting.

**Table 10 : Communication chain for emergency**

Role	Responsibilities
Project Manager	Overall authority; communicates authorities (Ministry of Health, EPA) and WB
Construction Manager	Directs site evacuation and emergency response.
HSE Manager	Ensures compliance, coordinates drills, manages reports.
Supervisors	Guide teams to muster points and perform headcount.
Emergency Response Team	Carries out rescue, and first aid.
All workers and Contractors	Immediately report incidents, follow instructions, evacuate if required

The Project ESMP states that the Contractor will provide emergency prevention and preparedness and response arrangements to emergency situations including and not limited to workplace accidents, workplace illnesses, flooding, fire outbreak, disease outbreak, labour unrest and security. It should also include unexpected friable ACM discovery, accidental fiber release, PPE failure, or a worker becoming ill inside the contamination zone for asbestos-related activities.

## 7. Stakeholder engagement strategy

Stakeholder mapping and engagement strategy is provided in Annex 2, it's based on the SLLAP Project SEP and stakeholder engagement activities that are specific to the scope of this mission. This section summarizes the main elements.

### 7.1. Objectives and principles

The goal is to ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.

It is also to create a process that provides opportunities for stakeholders to express their views and concerns and to allow the Project to consider and respond to them. The involvement of the local population is essential to the success of SLLAP, as it ensures smooth collaboration between project staff and local communities and minimizes and mitigates environmental and social risks related to the proposed project activities.

The key steps of the stakeholder engagement for this project are as follows:

- Identify current regulatory obligations related to stakeholder engagement;
- Identify and analyse stakeholders relevant to the Project;
- Map the stakeholders;
- Prepare the stakeholder participation plan;
- Conduct the engagement activities;
- Report on concerns raised by stakeholders and identify the next engagement and preparedness activities required (meetings, trainings, exercises etc.) and adapt the development of the asbestos management methodology accordingly.

In compliance with the SLLAP Project Stakeholder Engagement Plan (SEP), the following principles for stakeholder engagement for asbestos management shall be applied to ensure best practices in this respect:

- Openness and life-cycle approach;
- Informed participation and feedback;
- Inclusiveness and sensitivity.

### 7.2. Engagement activities carried out

The SLLAP SEP concludes that there was general support for the project as critical for Sierra Leone now. Stakeholders advised the project to involve affected communities right from the planning stage and pay attention to women involvement in key decisions and employment opportunities. Additionally, stakeholders advised the active involvement of the Local Councils during the implementation phase of the project as they interface with the local population and have the technical capacity, with staff to conduct effective monitoring.

The following stakeholder engagement activities were undertaken:

Table 11. Stakeholder engagement activities

Date	Stakeholder	Engagement Purpose	Engagement Method	Location
24/02/2026	SLLAP PCU	Kick off meeting of the project	Be to Be meeting	MLHCP
25/02/2026	Ministry of Environment Environmental Protection Agency (EPA)	Presentation of SLLAP project Presentation of Antea Scope of Work Questions on Specific regulation/procedure to follow Questions & Answers	Be to Be meeting	MoECC
26/02/2026	Ministry of Health	Presentation of the project Introduction to ACM related risks Specific regulation/procedure to follow for workers and waste Questions & Answers	Be to Be meeting	MoH
23/03/2026	Surveyors from the Ministry of Lands Ministry of Works and a community representative in the New England Community	Presentation of the project Questions & Answers	Be to Be meeting	New England Ville
23/04/2026	Ministry of Employment, Labour and Social Services and the Local Community Headsman	Presentation of the project Questions & Answers	Be to Be meeting	New England Ville
27/04/2026	Fireforce	Presentation of the project Questions & Answers	Be to Be meeting	Tower Hill

**Key points discussed and shared information:**

- In terms of regulation, there is no specific regulation related to asbestos management. The EPA Act covers activities related to hazardous waste management
- Specific **Guidelines related to asbestos management are currently under review at the Ministry of Environment for final approval – a draft of the guideline will be shared to SLLAP project**
- Questions were raised related to waste management:
  - Incinerators exist at some private sites and hospital sites (MML, Siera Rutile, Leone Rock, Rogbanban, Kinghoo mining company) but temperature should be verified.

- Further information related to hospital incinerators will be collected during the meeting with the public health
- There is no dedicated landfill for asbestos waste in Sierra Leone
  - **The solution to bury the waste at the project site was welcomed by the MoECC and EPA team** as it is reducing the exposure risk during transport and disposal.
- When questions were raised on the technical procedure that will be followed by the Contractor. It was mentioned that the AMP will detail the technical procedure and that the document will be shared with MoECC and EPA.
  - Also, the MoECC and EPA team confirm is willingness to participate in the half day training planned by the project.
  - In terms of regulation, there is no specific regulation related to asbestos risk management. However, **the Ministry of Health will share with the project the policy related to healthcare workers** that will need to be followed by the project
  - It was mentioned that asbestos management is still a 'Grey area' and welcomed positively the project and its willingness to handle this risk by applying international best practices
  - The representatives of the Ministry of Health confirmed their interest in the project and willingness to support it (internal staff and university can be involved). They also confirmed their willingness to participate in the workshop related to Asbestos Risk Management and site visit during removal works.
  - Stakeholders suggested that it would be better if removal works were restricted to weekends to minimise human exposure. They recommended that removal occur on Saturdays and Sundays when neighbouring offices have reduced occupancy, thereby reducing the number of potentially exposed individuals.
  - Most participants were of the view that workers should be provided with appropriate respirators, disposable coveralls, decontamination facilities and that a site induction and awareness session should be organised for all workers involved in asbestos removal, covering safe handling procedures.
  - The project must obtain an environmental permit before commencing asbestos removal, as Sierra Leone has a legal framework for hazardous waste management, including the Hazardous Wastes and Chemicals Management Regulations.
  - Concerns that the demolition presented the potential long-term public health impact if fibres are released into the community. They noted that neighbouring buildings host dozens of workers daily who would be at risk. However, it should be noted that the project could serve as a model or pilot for asbestos management in future public infrastructure projects across the country.
  - Participants also are of the view that the project develops a comprehensive air monitoring plan during the asbestos removal phase to ensure that fiber levels remain within acceptable safety limits.

### 7.3. Stakeholder identification and analysis

The current stakeholders and categories identified are presented in the following table.

Table 12. List of stakeholders relevant to the Project

Authorities	Civil Society	Business/ private activities	Directly Affected Groups
Key stakeholders			
<ul style="list-style-type: none"> <li>- Environment Protection Agency (EPA)</li> <li>- Ministry of Employment, Labour and Social Security</li> <li>- Ministry of Works and Public Assets (MWPA)</li> <li>- SLLAP PCU</li> <li>- Local Councils (City/Local Council Officials/Ward Committees)</li> </ul>	<ul style="list-style-type: none"> <li>- Fire force</li> </ul>	<ul style="list-style-type: none"> <li>- Contractors</li> </ul>	<ul style="list-style-type: none"> <li>- Communities in the vicinity of the site</li> </ul>
Other stakeholders			
<ul style="list-style-type: none"> <li>- National Disaster Management Agency (NDMA)</li> <li>- Ministry of Environment</li> <li>- Ministry of Health</li> <li>- Freetown City Council Office of Administrator and Registrar General</li> <li>- SALWACO, National Water Resources Management Agency</li> <li>- Ministry of Gender and Children's Affairs</li> </ul>	<ul style="list-style-type: none"> <li>- Sierra Leone Land Alliance</li> <li>- Media</li> </ul>		

Considering the SLLAP Project as a whole, section 3.3 of the SLLAP SEP provides analysis for interest and influence for every stakeholder identified.

However, the result of mapping for the specific analysis regarding the construction of new HQ for NLS is presented below:

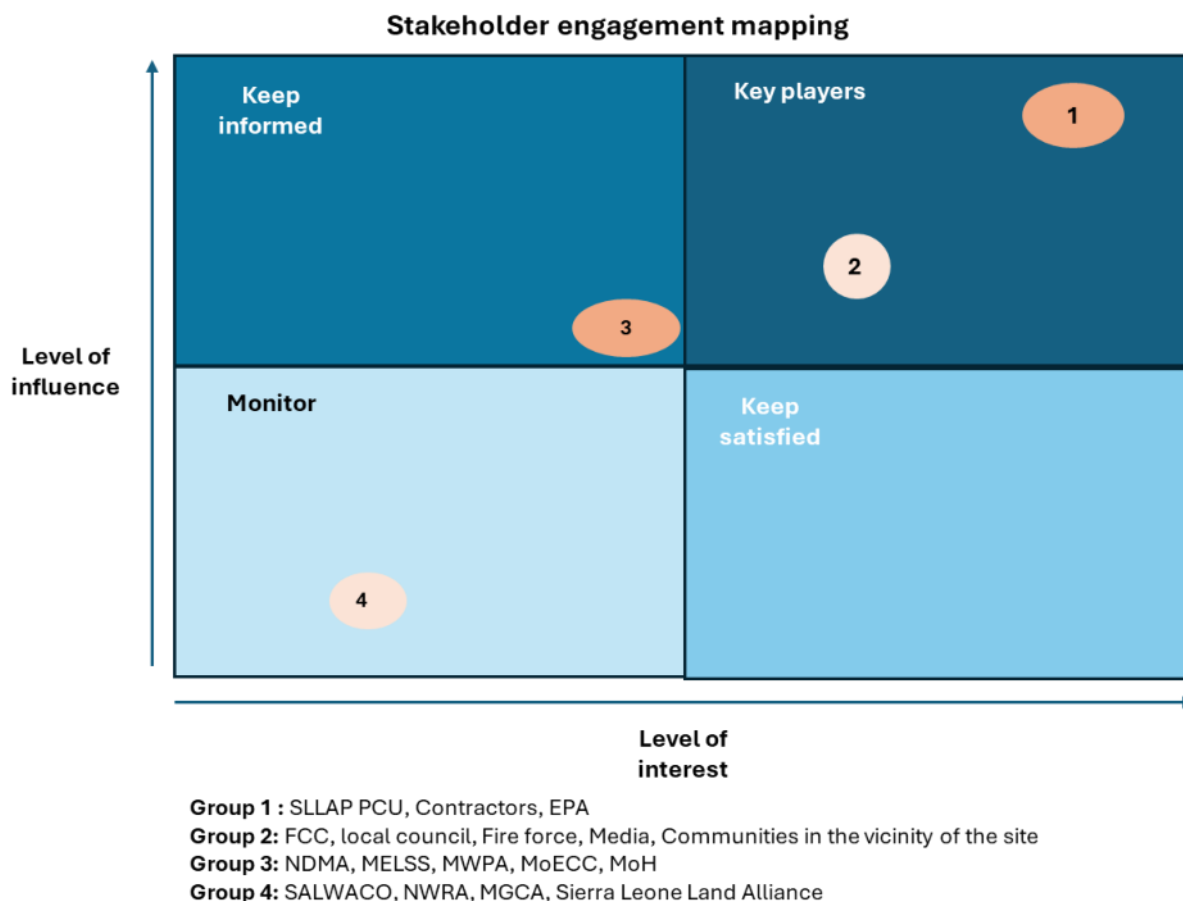


Figure 14. Stakeholder mapping

## 7.4. Engagement strategy

The engagement activities will aim to understand the stakeholders’ potential concerns, needs, and expectations related to the Project and collecting their inputs to build the Asbestos Management Plan.

In compliance with SLLAP SEP, stakeholder engagement can be achieved using one or more of the techniques listed below:

Table 13. Engagement methods (SLLAP SEP, 2022)

Engagement Method	Purpose & Details
Correspondence (Phone, Emails)	Distribute information to World Bank Group, Government officials, NGOs, Local Government, impacted communities & organizations/agencies Invite stakeholders to meetings and follow-up
One-on-one Meetings (via Zoom, Skype, Teleconference, etc.)	Seek views and opinions Enable stakeholders to speak freely about sensitive issues Build personal relationships Record meetings Resolve concerns & grievances as appropriate

Engagement Method	Purpose & Details
Formal & Informal Meetings	Present Project information to group of stakeholders Allow group to comment – opinions & views Build impersonal relation with high-level stakeholders Disseminate technical information Record discussions
Focus Group Meetings	Present project information to group of stakeholders Allow stakeholders to give views on targeted baseline information Build relationships with communities Record responses
Website/National Newspapers	Present project information & progress updates Disclose ESIA, ESMF, ESMP, RPF, SEP & other relevant project documentation
Direct Communication with Affected PAPs	Share information on project impacts & mitigation measures & implementation timelines Agree on options for neighbourhood upgrade & relocation options Participatory development of community action plans
Public Meetings	Present project information to large groups of stakeholders, especially communities Allow groups to give views & opinions Build relationship with communities, especially the impacted Distribute non-technical information Facilitate meetings with presentations, PowerPoints, posters, brochures, etc. Record discussions, comments & questions

Methods for consulting disadvantaged/vulnerable individuals or groups is detailed in Table 5 at section 4.3 from the SLLAP SEP. All engagement activities realized for asbestos management will comply with these methods.

In short, SLLAP will seek the views of vulnerable and disadvantaged groups during consultations, in a confidential manner to take their views into account during Project implementation. Information sharing and consultation techniques will be tailored according to the nature and common types of stakeholders, for example through visuals and sign language interpreters will be used for people with hearing disabilities and illiterate persons, where applicable; and venues will be chosen to be easily accessible to people with physical disabilities.

Engagement activities are presented below:

Table 14. Engagement strategies and activities

Objectives	Engagement techniques	Stakeholder concerned	Responsibility	Calendar
Preparation of AMP				
Present the project and gather concerns/ expectations	Individual meetings	Key authorities Fire force	Consultant	During AMP preparation
Present AMP and describe management measures	Leaflets, posters	All	SLLAP PCU	Once AMP is validated
Inform about works planning and health and safety measures for communities	Leaflets, posters Boards at construction site	Communities in the vicinity of the site	SLLAP PCU	2 weeks prior to the works
GRM establishment, dissemination, and awareness	Individual meetings	Contractors (workers) Communities in the vicinity of the site	SLLAP PCU Ministry of labour	2 weeks prior to the works
Works phase				
Inform about progress of work and implementation of safety measures	Boards at construction site	All	SLLAP PCU /Contractor	Continuously
Reporting on health, safety and environmental measures once the works are completed	Reporting	EPA	SLLAP PCU /Contractor	Two weeks after end of works

## 7.5. Grievance mechanism

A Grievance Redress Mechanism (GRM) has also been incorporated into the SLAPP global SEP where project related grievances will be resolved using laid down procedures. The GRM will be accessible and understandable for all stakeholders in the project and for the entire project life.

The construction project will utilise the grievance procedures outlined in the SLLAP GRM to handle grievances and complaints from project-affected parties. These procedures will be applied to ensure workers' and stakeholders' grievances while constructing the NLC office building and associated infrastructure are addressed.

The GRM will include the following steps:

- Receiving and registering a complaint;
- Screening and investigating the complaint;
- Formulating a response;
- Selecting a resolution approach;
- Implementing the solution;
- Announcing the result;
- Tracking and evaluating the results;
- Learning from the experience and communicating back to all parties involved; and
- Preparing timely reports to management on the nature and resolution of grievances.

The contractors are expected to have a GRM in place for their workers and communities. Community focal points at village level and grievance redress committees at Districts and national levels will be trained to receive and refer GBV related complaints to a GBV Service Provider hired by the project. For the construction of NLC HQ, the contractor's assigned Occupational Health, Safety, and Environment Officer and Liaison Officer at the construction site will receive, register, and report workers' grievances, complaints, incidents, and accidents.

Recently, toll-free lines number 840 for Africell, Qcell and Orange have been activated. Grievance Redress Committees have been established in Bo, kenema, Makeni and Port Loko in February 2025. One GRM Focal point will be appointed as part of Field Teams during survey and land title registration. The complaint section of the website has been activated. Members of the public can now lodge complaint through the website. The national GRC has been established and trained. Plans are underway to establish the district level GRC. The district level GRCs will be established during the field work to establish the land committees.

## 7.6. Roles and responsibilities

The MLHCP-PCU handles the day-to-day coordination of project activity and will provide oversight and supervision in implementing the SEP. The MLHCP- PCU will also ensure the hiring of the required personnel to implement the project including the roll out of activities related to SEP, i.e., a Community Engagement and Communications Specialist who will work closely with a Social and Gender Specialist and an Environmental Specialist. In addition, the MLHCP will ensure that the required funds are allocated and disbursed for the implementation of the SLLAP SEP.

The resources for the implementation of the SEP will be sourced from the Government of Sierra Leone GoSL and from Component 4 of the project which made budget provisions to cover costs associated

with overall project coordination including communication and outreach to stakeholders. SEP budget details are provided in section 5.1 (Table 9) of SLLAP SEP.

## 7.7. Monitoring and reporting

In compliance with SLLAP SEP, a SLAPP project monitoring and evaluation system will be established by the PCU-MLHCP to assess progress on indicators in the Project's results framework. Data on activities and outputs will be included in regular monthly and quarterly reports prepared by the PCUs based on inputs from the implementing agencies, including MDAs' focal points and at the local councils' level, in accordance with the format in the Project's Implementation Manual (PIM).

Key Performance Indicators (KPIs) will be monitored by responsible staff and monthly summaries and internal reports on public grievances, enquiries, related incidents, together with the status of implementation of associated corrective/preventative actions generated and conveyed to the World Bank and all other relevant stakeholders. Publication of status/annual report on stakeholder interaction on the project among others shall constitute one of the possible ways of conveying information to stakeholders.

KPIs for stakeholder engagement regarding asbestos management are the following:

**Table 15. Stakeholder engagement KPIs for the Project**

Indicator	Frequency	Methodology for data collection	Responsability for data collection
Number and type of stakeholder identified	Monthly	Stakeholder list	MLHCP &C/LCs
Number of consultations carried out with key stakeholders before and during project implementation	Monthly	Stakeholder consultation reports	MLHCP
Number and types of grievances recorded as a result of project activities	Monthly	GRM reports	MLHCP
Number of successful resolutions of concern and complaints related to project affected person	Monthly	GRM reports	MLHCP

## 8. Works monitoring and training plan

### 8.1. Training requirements and planning

Three categories of personnel are distinguished, each of which must undergo specific training:

- **Technical management personnel:** any worker within the company who has responsibility for technical and commercial decision-making, studies, the preparation of technical or contractual documents, and the definition, organisation and implementation of specifications and technical resources;
- **Site management staff:** employees within the company who have the necessary skills to manage and coordinate the execution of works, implement the withdrawal or containment plan, or the operating procedure;
- **Site operator personnel:** any worker responsible for carrying out work and/or installing, operating and maintaining the equipment entrusted to them, in accordance with procedures, the removal or containment plan, or the operating procedure.

The management and operators concerned will be trained in asbestos risk and the associated preventive measures. In general, this training covers:

- Products and devices likely to contain asbestos;
- Recommended working methods;
- The role and use of collective and individual protective equipment.

The training program will include:

- At the beginning of the ACM works removal, a **half-day workshop** dedicated to ACM related risks and management for the key stakeholders (SLLAP PCU, Contractor, EPA, Ministry of Environment, Ministry of Health) will address the following points:
  - The characteristics of asbestos, where it is found in construction materials;
  - Health hazards related to asbestos;
  - Collective and individual obligations and means of protection;
  - Management of waste from asbestos removal sites.

The workshop will include a presentation on how to wear PPEs.

- A **two-days training session** for site operator personnel:
  - Day 1, Morning:
    - Asbestos risk awareness (types of asbestos, where it is found? and health effects);
    - Overview of relevant construction materials and removal methods.
  - Day 1, Afternoon:
    - Overview of various PPE and protective clothing;
    - Dressing session: How to dress, standard checks, etc.
  - Day 2, Morning:
    - Setup of the airlock and pumps.
  - Day 2, Afternoon:

- Description and practice of procedures for entering and exiting the zone (for personnel and waste);
  - Description and practice of cleaning procedures;
  - Description and practice of packaging procedures for asbestos waste.
- **A learning by doing approach** during the implementation of AMP with the verification of asbestos removal site installations by the Consultant designated for the supervision.

Safety briefings will be held at the start of each activity to remind staff of the rules to be followed.

All training/awareness sessions will be recorded on attendance matrix. In addition, workers will be evaluated pre and post training and results will be documented, the authorization being given by the Contractor.

## 8.2. Monitoring and inspections

Monitoring activities are presented below:

**Table 16. Monitoring activities**

Objective	Frequency/timeline	Responsibility
Contractor routine self inspection	Daily	Contractor - OSHE officer
Random inspection	Minimum 2 per week	Supervision Consultant
Random inspection	Minimum 1 per week	SLLAP PCU
Visit to observe AMP implementation	1 week after works begins	SLLAP PCU and EPA

Inspections are based on on the diagnosis for identification of ACMs (see Table 1. Asbestos -Containing Materials (ACMs) Register Table).

All monitoring, inspection, audit, and site visit activities carried out during asbestos removal works shall be systematically documented to ensure full traceability, regulatory compliance, and alignment with GIIP.

For each inspection or site visit (routine or random), a formal inspection report shall be prepared and recorded. This documentation shall include, at a minimum:

- Date and time of the inspection;
- Name and role of the person(s) conducting the inspection;
- Areas inspected and activities observed;
- Identification of any non-conformities, deviations, or unsafe conditions;
- Photographic evidence where relevant.

All identified non-conformities shall be recorded in a dedicated register. Follow-up inspections shall be conducted to confirm the proper implementation of corrective actions, and closure of non-conformities shall be formally validated and recorded.

In addition, audit reports and official site visit reports (including those conducted by the EPA or Client representatives) shall be archived as part of the project documentation.

Recordkeeping is presented in section 8.4.

### 8.3. Conditions to reopening the construction site

The construction site will be reopened once:

- All the remaining structure have been vacuumed;
- All asbestos waste is stored in the secured temporary storage area, including the airlock;
- A final inspection shall be conducted by EPA;
- Clearance will be granted based on verification that all ACM has been properly removed, handled, and disposed of in accordance with the approved AMP;
- The Contractor and Supervising Consultant shall submit a final report, including waste tracking documentation, air monitoring results, and incident records;
- Formal EPA sign-off;
- All equipment and non-hazardous waste are removed from the working area.

### 8.4. Document control and recordkeeping

A comprehensive document control and recordkeeping system shall be established and maintained throughout the asbestos removal activities to ensure traceability, regulatory compliance, and alignment with Good International Industry Practice (GIIP) and international standards.

All records shall be securely stored (both in hard copy and digital format where possible), protected against loss or damage, and made available for inspection by relevant authorities upon request. Access to sensitive records (e.g., medical data) shall be strictly controlled and managed in accordance with applicable data protection principles.

The following records shall be maintained:

- i. Exposure logs: A register documenting all personnel entering the asbestos work area, including name, duration and frequency of exposure. Retention period must be minimum 30 years.
- ii. Medical surveillance records: Records of pre-employment and periodic medical examinations of workers exposed to asbestos, including fitness certificates and follow-up health monitoring. Retention period must be minimum 30 years after end of exposure.
- iii. Training registers: Attendance sheet, evaluation results. Retention period must be minimum 5 years after completion of works.
- iv. Waste tracking forms: Documentation of all asbestos waste generated, including quantities, packaging, transport, storage, and final disposal location (including sarcophagus records where applicable). Retention period must be minimum 10 years.
- v. Air monitoring results: All environmental and occupational air sampling data, including sampling locations, methodologies, laboratory results, and interpretation. Retention period must be minimum 10 years.
- vi. Inspection/audits results and non conformities : It should include in the final project close-out documentation to ensure long-term traceability and availability for regulatory review or audit. Retention period must be minimum 10 years.
- vii. Incident and accidents registers: A log of all incidents, accidents, and near-miss events related to asbestos handling, including investigation findings and corrective actions implemented. Retention period must be minimum 10 years.

The Contractor shall be responsible for maintaining these records on site, while the Supervising Consultant shall verify their completeness and compliance. Final records shall be compiled and submitted to the Client and relevant authorities, including EPA, as part of the project close-out documentation.

## 9. Budget & bidding clauses

### 9.1. Indicative budget

An indicative budget for AMP implementation is presented below:

**Table 17: AMP implementation cost breakdown**

Theme	Estimated cost (USD)
Preparatory works	25 000
Asbestos removal works	30 000
Air monitoring	4 500
Works close out	7 000
PPE	21 000
Waste management	To be estimated by the Engineer in charge of the design of the Sarcophagi

### 9.2. Bidding clauses

#### Compliance with AMP

The Contractor acknowledges the existence of an approved Asbestos Management Plan (“AMP”) applicable to the site and shall strictly comply with its provisions at all times.

The Contractor shall:

- Provide HSE risk assessment and associated procedures as described in the AMP;
- Ensure all personnel are informed of asbestos locations and associated risks;
- Implement control measures, including isolation, signage, and safe work procedures, as specified in the AMP;
- Immediately stop work and notify the Client in the event of any suspected disturbance of asbestos-containing materials (ACMs).

Any method statement or work plan submitted by the Contractor must demonstrate full alignment with the AMP.

#### Breach and Penalties

Failure to comply with asbestos-related regulatory requirements, or the approved HSE risk assessment and associated procedures as described in the AMP shall constitute a material breach of contract.

In the event of non-compliance, the Client reserves the right to:

- Immediately suspend works at no cost to the Client;
- Require removal and replacement of non-compliant personnel or subcontractors;
- Instruct remediation of affected areas at the Contractor's sole cost;
- Terminate the contract for default in cases of serious or repeated breaches.

The Contractor shall be fully liable for all costs, damages, claims, regulatory fines, and third-party liabilities arising from any non-compliance with asbestos regulations or the AMP.

### **Monitoring and Audit**

The Client reserves the right to conduct audits, inspections, and independent air monitoring at any time to verify compliance with asbestos-related obligations.

The Contractor shall provide full access, documentation, and cooperation during such audits. Any deficiencies identified must be rectified immediately at the Contractor's expense.

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# Annexes

Antea Group

Understanding today.  
Improving tomorrow.

## **Annex 1: Diagnostic and laboratory results**




JM2A Consulting  
5 rue Georges Jérôme Duret  
33310 Lormont

Christian ARNAUD  
Deputy Head of Infrastructure Department  
Southern Region  
Antea Group

# Mission report for identifying materials and products containing asbestos prior to the demolition of a building

This report cancels and replaces any previous reports



<p>Offer number : Contract number: <b>04 JM2A 2025</b> Report number (task number) : Date: <b>10/03/2026</b></p>	<p>Location of intervention: <b>Offices</b> Ministry Freetown Sierra Leone</p> <p>Report addressee: <b>ANTEA</b></p>	<p>Date of intervention: February 25, 2026</p> <p>Expert: <b>Mr. Jean Marie ALBANO</b></p> <p>Signature : </p>
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Total number of pages in the document: 24 pages*



## 1 GENERAL INFORMATION

### 1.1 BUILDING DESIGNATION

Address: **Freetown  
Sierra Leone**

Cadastral Reference: **Not provided**  
Date of Building Permit: /

Building type: **Offices**

### 1.2 DESIGNATION OF THE PRINCIPAL OWNER'S DESIGNATION

Name: **ANTEA**  
Address :

Name: **Ministry of Domains**  
Address: **Freetown  
Sierra Leone**

Quality: Client

### 1.3 MISSION EXECUTION

Location scouting carried out by: **ALBANO Jean Marie**  
Qualification certificate number: **CPDI 6456 Version 001**  
Date of issue: **02/06/2022**  
This report was prepared by a person whose skills are certified by:  
**I.Cert**

Analysis Laboratory: **Eurofins Analysis for the Southwest Building Sector**  
Laboratory address: **Chemin des Maures  
F 33300 GRADIGNAN**  
Accreditation number: **1-5840**

Order date: **In progress**

Accompanying person: **The representative of the client**

### 1.4 SIGNATURE OF THE SURVEYING OPERATOR DATE THE REPORT WAS PREPARED

Name of the diagnostician: **ALBANO Jean Marie**  
**JM2A Consulting**  
Operator's signature

Place and date of report establishment  
Done at **LORMONT** on **09/03/2026**

## 2 CONCLUSION(S) OF THE REPORT

**As part of the mission covered by this report, materials and products containing asbestos were identified.**



**SUMMARY :**

**GENERAL INFORMATION ..... 2**

*BUILDING DESIGNATION ..... 2*

*DESIGNATION OF THE PRINCIPAL ..... 2*

*DESIGNATION OF OWNER ..... 2*

*MISSION EXECUTION..... 2*

*SIGNATURE OF THE LOCATING OPERATOR ..... 2*

**CONCLUSION(S) OF REPORT ..... 2**

**DETAILED RESULTS OF THE LOCATION ..... 4**

*Materials or products containing asbestos ..... 4*

*Materials or products not containing asbestos ..... 4*

**NOT CARRIED OUT INVESTIGATIONS ..... 4**

*Premises not visited / Means of access to be made available by the client ..... 4*

*In-depth investigation(s) to be carried out by the client ..... 4*

*Materials or products not sampled ..... 4*

**RECOMMENDATIONS ..... 4**

**COMMENTS RELATING TO PERFORMANCE ..... 5**

*OBJECTIVE ..... 5*

*REGULATORY AND NORMATIVE REFERENCES ..... 5*

*CONDITIONS FOR CARRYING OUT THE SURVEY ..... 5*

**PROGRAM AND SCOPE OF MISSION ..... 6**

*DEMOLITION PROGRAM ..... 6*

*PROGRAM AND SCOPE ..... 6*

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**3 DETAILED RESULTS OF THE LOCATION**

As part of this mission, the JM2A consultant examined only the components and premises or volumes which he was able to access under normal safety conditions.

**3.1 Materials or products containing asbestos**

Floor	Local	Element	Material / Product	Criteria used to conclude	Survey reference	(ZPSO) Reference
Ground floor	Sanitary building First outing	Bac	Pipe	Analysis		
Ground floor	Sanitary building 2nd outing	Bac	Pipe	Analysis		
Ground floor	Garden	Plates	Corrugated sheets	Analysis		
Ground floor	Main building	Roofing and ridge	Corrugated sheets	Analysis		

**3.2 Materials or products not containing asbestos**

Floor	Local	Element	Material / Product	Criteria used to conclude	Survey reference	(ZPSO) Reference
Ground floor	Sanitary building	Walls	Filler	<b>Analysis</b>		
Ground floor	Main building	Windows	Window putty	<b>Analysis</b>		
Ground floor	Main building	Interior partitions	Semi-hard materials	<b>Analysis</b>		
Ground floor	Main building	Facade	Drink	<b>Analysis</b>		
Ground floor	Main building	False ceiling	Semi-hard materials	<b>Analysis</b>		

**4 INVESTIGATIONS NOT CARRYING OUT****4.1 Premises not visited / Means of access to be provided by the client**

Nothing

**4.2 In-depth investigation(s) to be carried out by the client**

Nothing

**4.3 Materials or products not collected**

Not applicable

**5 RECOMMENDATIONS**



The adequacy between the survey area associated with this service and the actual scope of intervention of the recipients of this document may evolve according to the needs of the client, any discovery of materials likely to contain asbestos not identified in particular for reasons of modification of the work program or heterogeneities not specified by the client, must be subject to an immediate suspension of work and appropriate additional investigations as soon as possible.

This document is an important part of the asbestos technical file which must be updated and sent to companies to establish their risk assessment.

We remind you that specific provisions for the protection of workers handling materials and products containing asbestos are stipulated in the labor code.

We advise you to use a specialist project manager to design the asbestos removal project and a specialist company to carry out the in-depth investigations with destructive testing and demolition work in accordance with the recommendations of the CNAMTS, the CARSAT – CRAM – CGSS, the guides of the INRS and the OPPBTP, and the directives of the labor inspectorate.

<b>6</b>	<b>COMMENTS RELATED TO THE SERVICE</b>
<b>6.1</b>	<b>OBJECTIVE</b>

The service aims to identify materials or products containing asbestos that the owner must dispose of before total demolition or demolition of more than 50% of the structure of their building.

<b>6.2</b>	<b>REGULATORY AND NORMATIVE REFERENCES</b>
------------	--

Law No. 2004-1343 of December 9, 2004,  
Decree No. 2010-1200 of October 11, 2010, issued pursuant to Article L 271-6 of the French Building and Housing Code,  
Decree 2011-629 of June 3, 2011: protection of the population against health risks linked to exposure to asbestos in buildings,  
Articles R 1334-19 and R 1334-22 of the Public Health Code,  
Order of 26 June 2013 relating to the identification of materials and products on list C containing asbestos and the content of the identification report,  
Order of 16 July 2019 relating to the identification of asbestos before certain operations carried out in buildings, as amended by the order of 23 January 2020.  
Order of 24 December 2021 defining the certification criteria for technical diagnostic operators and training and accreditation bodies for certification bodies ,  
NF X 46 020 standard of August 5, 2017.

<b>6.3</b>	<b>CONDITIONS FOR CARRYING OUT THE SURVEY</b>
------------	---

**Date of site survey: 25/02/2026**

**Conditions for the survey :** The survey is carried out in accordance with standard NF X 46-020, which prescribes the minimum frequency of sampling and soundings within areas with similar structures. When the survey cannot be separated from the commencement of the operation itself for technical reasons communicated by the surveying operator (removal of linings, plenums, etc. ), the client arranges for the survey to be carried out as the operation progresses.

**Resources made available to the operator :** None

**Documents submitted :** None

**Comment : None**

The identification of materials and products from list C containing asbestos, defined in article R. 1334-22 of the public health code, consists of searching for, identifying and locating materials and products containing asbestos incorporated or forming an inseparable part of the building or part of the building concerned by the identification.

**It can only be finalized after the building has been completely evacuated and the furniture removed so that all components are accessible .**



## 7 PROGRAM AND SCOPE OF THE MISSION

### 7.1 DEMOLITION PROGRAM

Total demolition

### 7.2 PROGRAM AND MONITORING PERIMETER

**Scope of identification :** All premises or parts of buildings concerned by the demolition as defined by the client.  
**Survey program :** Materials and products likely to contain asbestos in building elements and likely to be affected by demolition with regard to the materials or products appearing in list C of appendix 13-9 of the Public Health Code, table A1 of standard NF X 46 020 and any other material known to contain asbestos of which the operator may be aware.

If products or materials that may contain asbestos have not been investigated because they were not identified as being covered by the demolition program as communicated by the client, the latter will have to carry out further investigations.

#### List of premises (visited / not visited):


Floor	Premises / part of a building	Visited	Justification
Ground floor	Sanitary building	Yes	
Ground floor	Main building	Yes	


## 8 PREVIOUS REPORT(S)

**Previous reports :**  
Absence of previous or undisclosed reports





APPENDIX IDENTIFICATION AND RATING SHEETS

<b>ELEMENT : Conduit</b>		
<b>Location</b>		
		
<b>Customer name</b>	<b>Case number</b>	<b>Part of a work</b>
ANTEA	04 JM2A 2025	Ground floor – sanitary building
<b>Material</b>	<b>Date of collection</b>	<b>Operator name</b>
Fiber cement pipe	25/02/2026	ALBANO Jean Marie
<b>Location</b>		
Conduit 1st exit		
<b>Asbestos result</b>		
<b>Presence of asbestos</b>		

<b>ELEMENT : Conduit</b>		
<b>Location</b>		
		
<b>Customer name</b>	<b>Case number</b>	<b>Part of a work</b>
ANTEA	04 JM2A 2025	Ground floor – Sanitary building
<b>Material</b>	<b>Date of collection</b>	<b>Operator name</b>
Fiber cement pipe	25/02/2026	ALBANO Jean Marie
<b>Location</b>		
Conduit 2nd outlet		
<b>Asbestos result</b>		
<b>Presence of asbestos</b>		



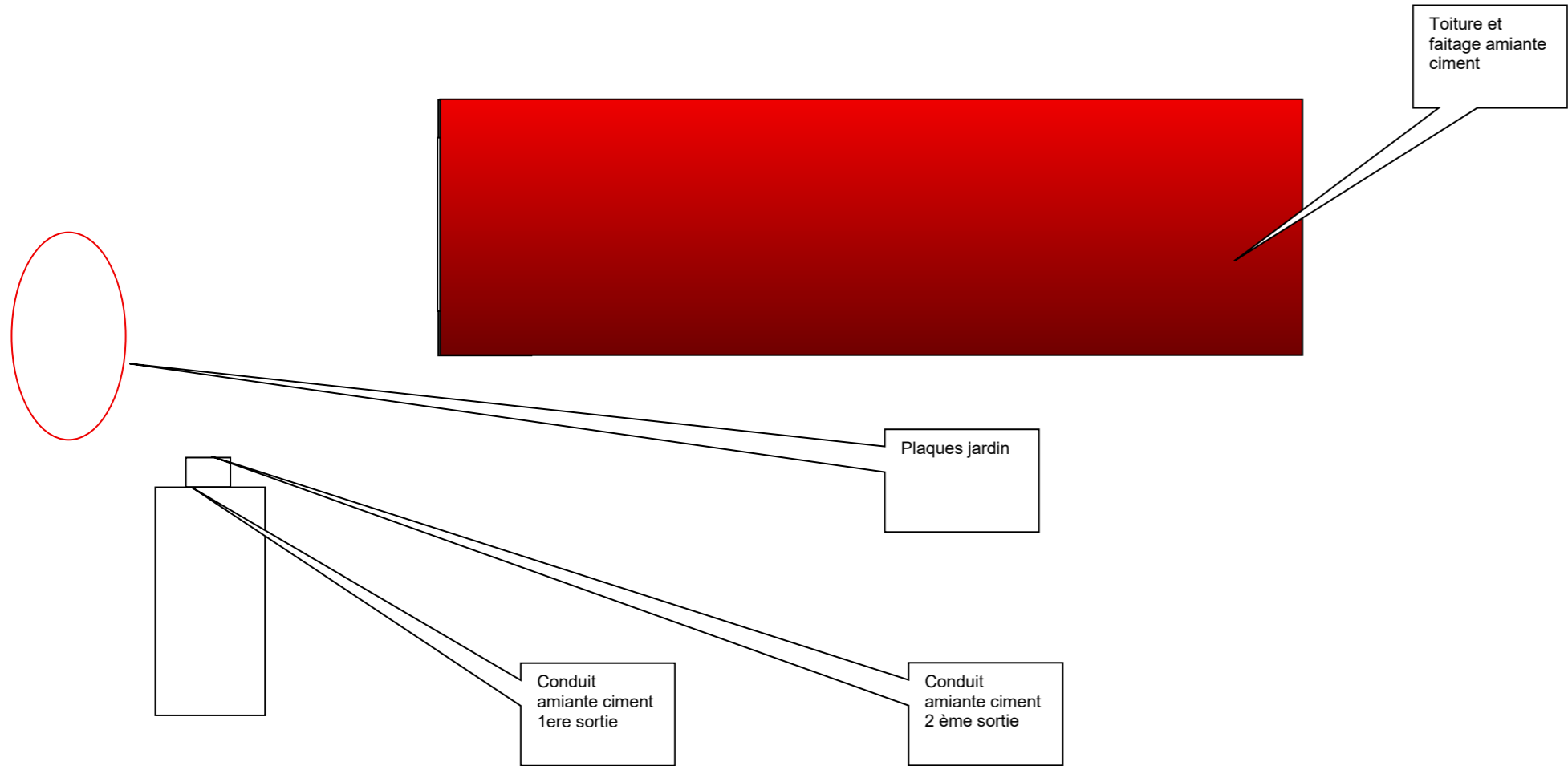
<b>ELEMENT : Garden</b>		
<b>Location</b>		
		
<b>Customer name</b>	<b>Case number</b>	<b>Part of a work</b>
ANTEA	04 JM2A 2025	Ground floor - Garden
<b>Material</b>	<b>Date of collection</b>	<b>Operator name</b>
Corrugated sheets - Raw	25/02/2026	ALBANO Jean Marie
<b>Location</b>		
Garden		
<b>Asbestos result</b>		
<b>Presence of asbestos</b>		

<b>ELEMENT : Roofing and ridge</b>		
<b>Location</b>		
		
<b>Customer name</b>	<b>Case number</b>	<b>Part of a work</b>
ANTEA	04 JM2A 2025	Ground floor – Main building
<b>Material</b>	<b>Date of collection</b>	<b>Operator name</b>
Corrugated sheets - Raw	25/02/2026	ALBANO Jean Marie
<b>Location</b>		
Roofing - Roofing		
<b>Asbestos result</b>		
<b>Presence of asbestos</b>		



**APPENDIX SKETCH**

Location chart			
Customer :	ANTEA	Title :	Sketch No. 1
Report No.:		Location of intervention:	Freetown Sierra Leone Offices
Plate number:	1/1		
Kind :	Standard layout diagram		
Date :	25/02/2026	Building :	Building to be demolished
Speaker:	ALBANO Jean Marie	Floor :	Ground Floor
Origin of the plan:	Sketch or document transmitted	Comment :	Freehand sketch without dimensions





**APPENDIX ANALYSIS REPORTS**



## Eurofins Analyses Pour Le Batiment Sud-Ouest SAS

JEAN-MARIE ALBANO  
Monsieur Jean Marie ALBANO  
JM2A Consulting  
5 Rue Georges Jérôme Duret  
33310 LORMONT

## RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012814-01 Date d'émission de rapport : 10/03/2026 11:59 Page 1/2  
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.  
Toute modification est identifiée par une mise en forme gras, italique et souligné ou notifiée dans les observations.  
Dossier N° : 26K007127 Date de réception : 04/03/2026 Date d'analyse : 05/03/2026  
Référence dossier Client:SIERRA LEONE

N° éch.	Référence client	Description visuelle	Technique utilisée / Analyste	Préparation		Résultats
				Nb prep / Nb grilles ou lames	Type	
001 (1)	1 Bâtiment Sanitaires 1ère sortie fibro	Matériau dur fibreux de type fibres-ciment (gris)	MOLP* / LP5L	4 / 4*	-*	Fibres d'amiante de type chrysotile, riébeckite-amiante (crocidolite)

Observation(s) échantillon(s)

(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

**Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :**

Traitement par une méthode interne (**mode opératoire T-MOLP-WO24083**) en vue d'une identification des fibres au Microscope Optique à Lumière Polarisée (**MOLP**) selon le guide HSG 248 - **annexe 2**.

NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ceci afin d'éviter le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.

NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables\*\* inférieure à la limite de détection. \*\* Pour être optiquement observable, une fibre doit avoir une largeur supérieure à 0,2 micromètre (µm)"; "Fibres d'amiante non détectées" au MET s'entend comme : " aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante inférieure à la limite de détection."

NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et /ou en MET) est de 0.1% en masse.

NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en œuvre les deux techniques MOLP et META sur tous les échantillons massifs. La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.

NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JOFR n°0238 du 13 octobre 2022, texte n°10), Arrêté du 3 juin 2025 (JORFN°0152 du 2 juillet 2025 texte N° 8).

NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 8 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

Tous les éléments de traçabilité sont disponibles sur demande. La reproduction de ce document n'est autorisée que sous sa forme intégrale. Il comporte 2 page(s). Les résultats du présent rapport s'appliquent aux objets tels qu'ils ont été reçus et ne concernent que les objets soumis à l'essai. Seules certaines prestations rapportées dans ce document sont couvertes par l'accréditation. Elles sont identifiées par le symbole \*.

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Eurofins Analyses Pour Le Batiment Sud-Ouest SAS

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RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012815-01 Date d'émission de rapport : 10/03/2026 11:59 Page1/2
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.
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Dossier N° : 26K007127 Date de réception : 04/03/2026 Date d'analyse : 05/03/2026
Référence dossier Client:SIERRA LEONE

Table with 7 columns: N° éch., Référence client, Description visuelle, Technique utilisée / Analyste, Préparation (Nb prep / Nb grilles ou lames, Type), Résultats. Row 1: 002 (1) (2), 2 Bâtiment Sanitaires Enduit de rebouche, Matériau semi-dur (gris) (granulaire), MET \* / ZD6P, 1 / 1 \*, Calcination attaque acide broyage mécanique (méthode interne de traitement), Fibres d'amiante non détectées \*

Observation(s) échantillon(s)

- (1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.
(2) La totalité de l'échantillon a été utilisée pour rendre le résultat. Une contre-analyse sera impossible.

Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

Traitement par une méthode interne (mode opératoire T-PM-WO22725) en vue d'une identification des fibres au Microscope Electronique à Transmission (MET) selon parties utiles de la norme NFX 43-050.

Tous les éléments de traçabilité sont disponibles sur demande. La reproduction de ce document n'est autorisée que sous sa forme intégrale. Il comporte 2 page(s). Les résultats du présent rapport s'appliquent aux objets tels qu'ils ont été reçus et ne concernent que les objets soumis à l'essai. Seules certaines prestations rapportées dans ce document sont couvertes par l'accréditation. Elles sont identifiées par le symbole \*.

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## Eurofins Analyses Pour Le Batiment Sud-Ouest SAS

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### RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012816-01      Date d'émission de rapport : 10/03/2026 12:00      Page 1/2  
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 08/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.  
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Dossier N° : 26K007127      Date de réception : 04/03/2026      Date d'analyse : 05/03/2026  
Référence dossier Client:SIERRA LEONE

N° éch.	Référence client	Description visuelle	Technique utilisée / Analyste	Préparation		Résultats
				Nb prep / Nb grilles ou lames	Type	
003 (1)	3 Bâtiment Sanitaires 2eme sortie fibro	Matériau dur fibreux de type fibres-ciment (gris)	MOLP* / LP5L	4 / 4*	-*	Fibres d'amiante de type chrysotile, niébeckite-amiante (crocidolite)*

Observation(s) échantillon(s)  
(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

#### Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

Traitement par une méthode interne (mode opératoire T-MOLP-WO24083) en vue d'une identification des fibres au Microscope Optique à Lumière Polarisée (MOLP) selon le guide HSG 248 - annexe 2.

NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ce qui a pour effet d'augmenter le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.

NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables" inférieure à la limite de détection. \*\* Pour être optiquement observable, une fibre doit avoir une largeur supérieure à 0,2 micromètre (µm) ; "Fibres d'amiante non détectées" au MET s'entend comme : " aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante inférieure à la limite de détection."

NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et/ou en MET) est de 0.1% en masse.

NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en œuvre les deux techniques MOLP et META sur tous les échantillons massifs. La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.

NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JOFR n°0238 du 13 octobre 2022, texte n°10), Arrêté du 3 juin 2025 (JORFN°0152 du 2 juillet 2025 texte N° 8).

NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

Tous les éléments de traçabilité sont disponibles sur demande. La reproduction de ce document n'est autorisée que sous sa forme intégrale. Il comporte 2 page(s). Les résultats du présent rapport s'appliquent aux objets tels qu'ils ont été reçus et ne concernent que les objets soumis à l'essai. Seules certaines prestations rapportées dans ce document sont couvertes par l'accréditation. Elles sont identifiées par le symbole \*.

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**Eurofins Analyses Pour Le Batiment Sud-Ouest SAS**

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**RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX**

N° de rapport d'analyse : AR-26-KC-012817-01      Date d'émission de rapport : 10/03/2026 12:01      Page 1/2  
 Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.  
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 Dossier N° : 26K007127      Date de réception : 04/03/2026      Date d'analyse : 05/03/2026  
 Référence dossier Client:SIERRA LEONE

N° éch.	Référence client	Description visuelle	Technique utilisée / Analyste	Préparation		Résultats
				Nb prep / Nb grilles ou lames	Type	
004 (1)	4 Soutènement Plaques	Matériau dur fibreux de type fibres-ciment (beige)	MOLP* / LP5L	2 / 2*	-*	Fibres d'amiante de type chrysotile*

Observation(s) échantillon(s)  
 (1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

**Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :**

Traitement par une méthode interne (mode opératoire T-MOLP-WO24083) en vue d'une identification des fibres au Microscope Optique à Lumière Polarisée (MOLP) selon le guide HSG 248 - annexe 2.

- NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ceci afin d'éviter le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.
- NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables" inférieure à la limite de détection. \*\* Pour être optiquement observable, une fibre doit avoir une largeur supérieure à 0,2 micromètre (µm) ; "Fibres d'amiante non détectées" au MET s'entend comme : " aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante inférieure à la limite de détection."
- NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et /ou en MET) est de 0.1% en masse.
- NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en oeuvre les deux techniques MOLP et META sur tous les échantillons massifs . La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.
- NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JORF n°0238 du 13 octobre 2022, texte n°10), Arrêté du 3 juin 2025 (JORFN°0152 du 2 juillet 2025 texte N° 8).
- NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

Tous les éléments de traçabilité sont disponibles sur demande. La reproduction de ce document n'est autorisée que sous sa forme intégrale. Il comporte 2 page(s). Les résultats du présent rapport s'appliquent aux objets tels qu'ils ont été reçus et ne concernent que les objets soumis à l'essai. Seules certaines prestations rapportées dans ce document sont couvertes par l'accréditation. Elles sont identifiées par le symbole \*.

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RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012818-01 Date d'émission de rapport : 10/03/2026 12:01 Page 1/2
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.
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Dossier N° : 26K007127 Date de réception : 04/03/2026 Date d'analyse : 05/03/2026
Référence dossier Client:SIERRA LEONE

Table with 6 columns: N° éch., Référence client, Description visuelle, Technique utilisée / Analyste, Préparation (Nb prep / Nb grilles ou lames, Type), Résultats. Row 1: 005 (1), 5 Bâtiment Principal Toiture et faitage, Matériau dur fibreux de type fibres-ciment (beige), MOLP\* / LP5L, 2 / 2\*, -, Fibres d'amiante de type chrysotile\*

Observation(s) échantillon(s)
(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

Traitement par une méthode interne (mode opératoire T-MOLP-WO24083) en vue d'une identification des fibres au Microscope Optique à Lumière Polarisée (MOLP) selon le guide HSG 248 - annexe 2.

- NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur.
NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables" inférieure à la limite de détection.
NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et/ou en MET) est de 0.1% en masse.
NB 4 : Le présent rapport ne mentionne que les analyses conclusives.
NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JORF n°0238 du 13 octobre 2022, texte n°10), Arrêté du 3 juin 2025 (JORFN°0152 du 2 juillet 2025 texte n° 8).
NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés.

Tous les éléments de traçabilité sont disponibles sur demande. La reproduction de ce document n'est autorisée que sous sa forme intégrale. Il comporte 2 page(s). Les résultats du présent rapport s'appliquent aux objets tels qu'ils ont été reçus et ne concernent que les objets soumis à l'essai. Seules certaines prestations rapportées dans ce document sont couvertes par l'accréditation. Elles sont identifiées par le symbole "

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RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012819-01 Date d'émission de rapport : 10/03/2026 12:02 Page 1/2
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.
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Dossier N° : 26K007127 Date de réception : 04/03/2026 Date d'analyse : 05/03/2026
Référence dossier Client:SIERRA LEONE

Table with 6 columns: N° éch., Référence client, Description visuelle, Technique utilisée / Analyste, Préparation (Nb prep / Nb grilles ou lames, Type), Résultats. Row 1: 006 (1), 6 Bâtiment Principal Mastic de fenêtres, Matériau de type peinture (blanc) ; matériau semi-dur de type mastic (beige), MET / ZD6P, 1 / 1\*, Calcination attaque acide broyage mécanique (méthode interne de traitement), Fibres d'amiante non détectées\*

Observation(s) échantillon(s)
(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

Traitement par une méthode interne (mode opératoire T-PM-WO22725) en vue d'une identification des fibres au Microscope Electronique à Transmission (MET) selon parties utiles de la norme NFX 43-050.

NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ceci afin d'éviter le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.

NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables" inférieure à la limite de détection. " Pour être optiquement observable, une fibre doit avoir une largeur supérieure à 0,2 micromètre (µm) ; "Fibres d'amiante non détectées" au MET s'entend comme : " aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante inférieure à la limite de détection."

NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et/ou en MET) est de 0.1% en masse.

NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en oeuvre les deux techniques MOLP et META sur tous les échantillons massifs. La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.

NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JOFN n°0238 du 13 octobre 2022, texte n°10), Arrêté du 3 juin 2025 (JOFN n°0152 du 2 juillet 2025 texte n° 8).

NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

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## Eurofins Analyses Pour Le Batiment Sud-Ouest SAS

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### RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012820-01      Date d'émission de rapport : 10/03/2026 12:03      Page 1/2  
 Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.  
 Toute modification est identifiée par une mise en forme gras, italique et souligné ou notifiée dans les observations.  
 Dossier N° : 26K007127      Date de réception : 04/03/2026      Date d'analyse : 05/03/2026  
 Référence dossier Client:SIERRA LEONE

N° éch.	Référence client	Description visuelle	Technique utilisée / Analyste	Préparation		Résultats
				Nb prep / Nb grilles ou lames	Type	
007 (1)	7 Bâtiment Principal Cloisons intérieur	Matériau semi-dur de type plaque (marron) (fibreuse)	MET* / ZD8P	1 / 1*	Calcination* attaque acide broyage mécanique (méthode interne de traitement)	Fibres d'amiante non détectées*

**Observation(s) échantillon(s)**  
 (1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

#### Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

Traitement par une méthode interne (mode opératoire T-PM-WO22725) en vue d'une identification des fibres au Microscope Electronique à Transmission (MET) selon parties utiles de la norme NFX 43-050.

NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ce qui évite le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.

NB 2 : "Fibres d'amiante non détectées au MOLP" s'entend comme : "aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante optiquement observables" Inférieure à la limite de détection. " Pour être optiquement observable, une fibre doit avoir une largeur supérieure à 0,2 micromètre (µm) ; "Fibres d'amiante non détectées" au MET s'entend comme : " aucune fibre d'amiante n'a été détectée, l'échantillon objet de l'essai peut éventuellement renfermer une teneur en fibre d'amiante inférieure à la limite de détection."

NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et/ou en MET) est de 0.1% en masse.

NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en œuvre les deux techniques MOLP et META sur tous les échantillons massifs. La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.

NB 5 : Analyse réalisée dans le cadre des textes réglementaires suivants : Décret n° 2017-899 du 9 mai 2017, Décret n° 2019-251 du 27 mars 2019, Décret n° 2011-629 du 3 juin 2011, Arrêté du 1er octobre 2019 (JORF n°0245 du 20 octobre 2019 texte n° 18) modifié par l'Arrêté du 26 décembre 2019, Arrêté du 25 juillet 2022 (JORF n°0238 du 13 octobre 2022, texte n°10), ), Arrêté du 3 juin 2025 (JORFN°0152 du 2 juillet 2025 texte N° 8).

NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

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## RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012821-01 Date d'émission de rapport : 10/03/2026 12:03 Page 1/2  
Annule et remplace la version AR-26-KC-012213-01 ayant pour date d'émission le 06/03/2026 à 16:12, qui doit être détruite ou nous être renvoyée.  
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Dossier N° : 26K007127 Date de réception : 04/03/2026 Date d'analyse : 05/03/2026  
Référence dossier Client:SIERRA LEONE

N° éch.	Référence client	Description visuelle	Technique utilisée / Analyste	Préparation		Résultats
				Nb prep / Nb grilles ou lames	Type	
008 (1)	8 Bâtiment Principal Façade	Matériau (noir) ; matériau semi-dur fibreux de type bois, copeaux (marron)	MET * / ZD6P	1 / 1 *	Calcination attaque acide broyage mécanique (méthode interne de traitement)	Fibres d'amiante non détectées *
		Matériau semi-dur fibreux de type bois, copeaux (marron)	MOLP * / LP5L	2 / 2 *	- *	Fibres d'amiante non détectées *

Observation(s) échantillon(s)

(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

**Méthodes d'analyses employées pour la recherche qualitative des fibres d'amiante dans les matériaux :**

Traitement par une méthode interne (mode opératoire T-MOLP-WO24083) en vue d'une identification des fibres au Microscope Optique à Lumière Polarisée (MOLP) selon le guide HSG 248 - annexe 2.

Traitement par une méthode interne (mode opératoire T-PM-WO22725) en vue d'une identification des fibres au Microscope Electronique à Transmission (MET) selon parties utiles de la norme NFX 43-050.

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RAPPORT D'ANALYSE D'AMIANTE DANS LES MATERIAUX

N° de rapport d'analyse : AR-26-KC-012822-01 Date d'émission de rapport : 10/03/2026 12:04 Page1/2
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Référence dossier Client:SIERRA LEONE

Table with 7 columns: N° éch., Référence client, Description visuelle, Technique utilisée / Analyste, Préparation (Nb prep / Nb grilles ou lames, Type), Résultats. Row 1: 009 (1), 9 Bâtiment Principal Faux plafond, Matériau de type peinture (blanc) ; matériau semi-dur de type plaque (marron) (fibreuse), MET\* / ZD8P, 1 / 1\*, Calcination attaque acide broyage mécanique (méthode interne de traitement), Fibres d'amiante non détectées\*

Observation(s) échantillon(s)
(1) L'objet de la modification de cette version porte sur le format de rapport demandé par le client.

Méthode d'analyse employée pour la recherche qualitative des fibres d'amiante dans les matériaux :

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NB 1 : Sauf information contraire sur ce rapport, le laboratoire effectue une analyse couche par couche de l'échantillon transmis par le demandeur. Des composants décrits simultanément dans une même couche n'ont pas pu faire l'objet de prises d'essai séparées pour l'analyse, ce qui évite le risque d'inter-contamination. Les raisons de cette non séparation peuvent être : la trop grande adhérence des couches entre elles, des couches trop fines, le manque de matière d'une des couches, l'état de conservation dégradé d'une des couches.

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NB 3 : Pour la recherche d'amiante dans les matériaux, la limite de détection garantie par prise d'essai dans les matériaux (en MOLP et/ou en MET) est de 0.1% en masse.

NB 4 : Le présent rapport ne mentionne que les analyses conclusives. Toutefois, conformément à son offre et à l'arrêté du 1er octobre 2019, le laboratoire met en œuvre les deux techniques MOLP et META sur tous les échantillons massifs. La mention sur le rapport d'une technique d'analyse par MET indique que les échantillons ont été traités selon l'annexe 2 du guide HSG 248 (MOLP) mais sans aboutir à un résultat conclusif.

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NB 6 : Le rapport est établi dans le cadre du cas 1 de l'article 6 de l'arrêté du 1er octobre 2019 à savoir la détection et l'identification d'amiante délibérément ajouté dans les matériaux et produits manufacturés. Dans ce cadre l'indication 1/1 en META signifie que deux prises d'essais ont été réalisées et mélangées dans une préparation unique qui conduit à l'obtention d'une seule grille.

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APPENDIX ESTIMATED QUANTITY TABLE

Floor	Local	Element	Material / Product	Quantity estimation	Observations
Ground floor	<b>Sanitary facilities</b>	<b>1st outing</b>	Pipe	<b>0.5 ml</b>	
Ground floor	<b>Sanitary facilities</b>	<b>2nd outing</b>	Pipe	<b>0.5 ml</b>	
Ground floor	<b>Garden</b>	<b>Support</b>	Plates	<b>10 ml</b>	
Ground floor	<b>Main building</b>	<b>Roofing</b>	Corrugated sheets	<b>600 m<sup>2</sup></b>	
Ground floor	<b>Main building</b>	<b>Ridge</b>	Accessories	<b>70 ml</b>	

The estimation of quantities only concerns materials or products containing asbestos present in the building and covered by the work program.

It does not take into account:

- Other materials or products containing asbestos identified in the building but not covered by the work program

|| The techniques used by construction companies for removing identified materials or products.

The amount of waste generated by the companies themselves when disposing of these materials or products (personal protective equipment, collective protective equipment, etc.)



APPENDIX CERTIFICATE FROM THE LANDING OPERATOR



# Certificat de compétences Diagnosticueur Immobilier

N° CPDI 6456 Version 001

Je soussignée, Juliette JANNOT, Directrice Générale d'I.Cert, atteste que :

**Monsieur ALBANO Jean-Marie**

Est certifié(e) selon le référentiel I.Cert en vigueur (CPE DI DR 01 (cycle de 5 ans) - CPE DI DR 06 (cycle de 7 ans)), dispositif de certification de personnes réalisant des diagnostics immobiliers pour les missions suivantes :

Amiante avec mention    Amiante Avec Mention  
Date d'effet : 02/06/2022 - Date d'expiration : 01/06/2029

Amiante sans mention    Amiante Sans Mention  
Date d'effet : 02/06/2022 - Date d'expiration : 01/06/2029

En foi de quoi ce certificat est délivré, pour valoir et servir ce que de droit.  
Edité à Saint-Grégoire, le 03/06/2022.

Arrêté du 21 novembre 2006 modifié définissant les critères de certification des compétences des personnes physiques opérateurs des constats de risque d'exposition au plomb, des diagnostics du risque d'intoxication par le plomb des peintures ou des contrôles après travaux en présence de plomb, et les critères d'accréditation des organismes de certification - Arrêté du 25 juillet 2016 définissant les critères de certification des compétences des personnes physiques opérateurs de repérages, d'évaluation périodique de l'état de conservation des matériaux et produits contenant de l'amiante, et d'examen visuel après travaux dans les immeubles bâtis et les critères d'accréditation des organismes de certification ou Arrêté du 6 novembre 2019 relatif aux compétences des personnes physiques opérateurs de repérage, d'évaluation périodique de l'état de conservation des matériaux et produits contenant de l'amiante, et d'examen visuel après travaux, dans les immeubles bâtis ou Arrêté du 21 novembre 2006 définissant les critères de certification des compétences des personnes physiques opérateurs de repérage et de diagnostic amiante dans les immeubles bâtis et les critères d'accréditation des organismes de certification - Arrêté du 30 octobre 2006 modifié définissant les critères de certification des compétences des personnes physiques réalisant l'état relatif à la présence de termites dans le bâtiment et les critères d'accréditation des organismes de certification - Arrêté du 16 octobre 2006 modifié définissant les critères de certification des compétences des personnes physiques réalisant le diagnostic de performance énergétique ou l'attestation de prise en compte de la réglementation thermique, et les critères d'accréditation des organismes de certification - Arrêté du 6 avril 2007 modifié définissant les critères de certification des compétences des personnes physiques réalisant l'état de l'installation intérieure de gaz et les critères d'accréditation des organismes de certification - Arrêté du 8 juillet 2008 modifié définissant les critères de certification des compétences des personnes physiques réalisant l'état de l'installation intérieure d'électricité et les critères d'accréditation des organismes de certification - Ou Arrêté du 2 juillet 2018 modifié définissant les critères de certification des opérateurs de diagnostic technique et des organismes de formation et d'accréditation des organismes de certification Ou Arrêté du 24 décembre 2021 définissant les critères de certification des opérateurs de diagnostic technique et des organismes de formation et d'accréditation des organismes de certification.

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Parc d'Affaires, Espace Performance – Bât K – 35760 Saint-Grégoire



CPE DIFR 11 rev18



**ADVICE ON WASTE DISPOSAL METHODS**

The responsibilities of the waste producer

Article L. 541-2 of the Environmental Code states: “Every producer or holder of waste is required to ensure, or have ensured, its management, in accordance with the provisions of this chapter. Every producer or holder of waste is responsible for the management of this waste until its final disposal or recovery, even when the waste is transferred to a third party for processing. Every producer or holder of waste must ensure that the person to whom they hand it over is authorized to take charge of it.”

Therefore, for asbestos removal work, the project owner (usually the property owner) is responsible for the proper disposal of waste generated on the site. Construction waste, such as personal protective equipment for workers, is the responsibility of the company carrying out the work.

Waste families



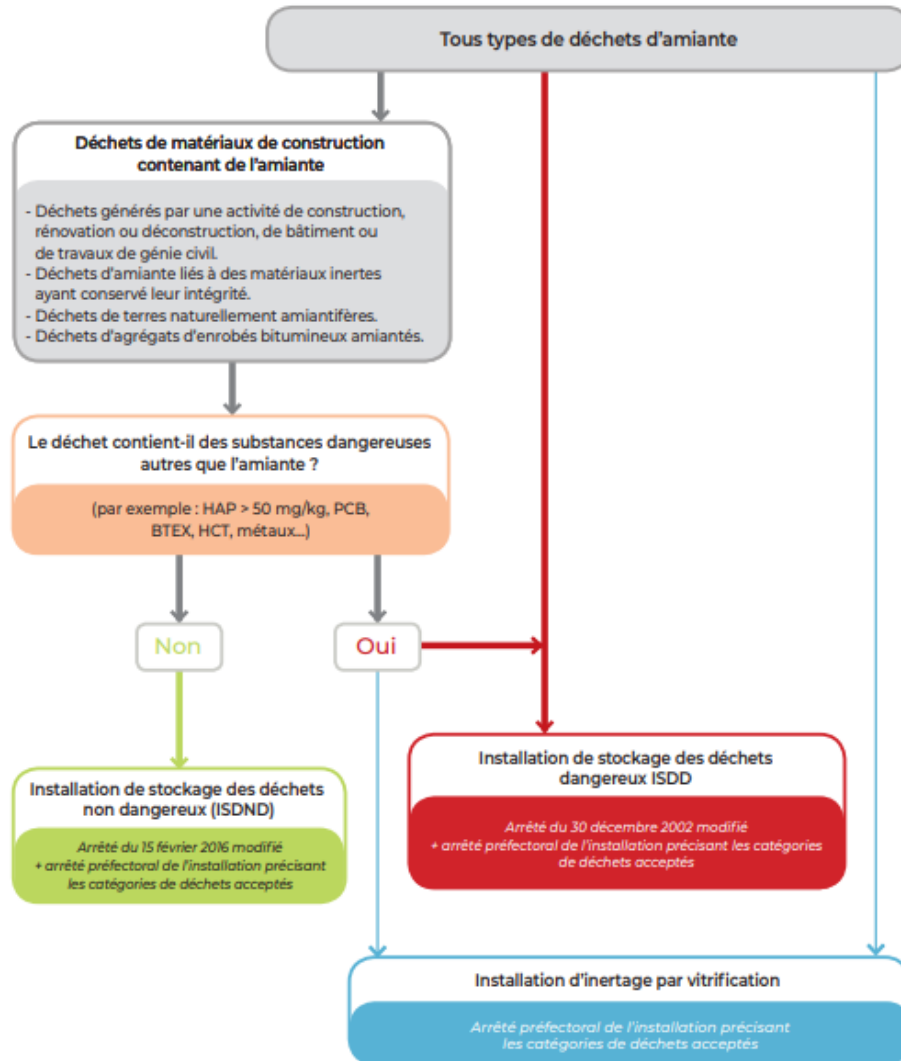
The different types of asbestos waste

Asbestos waste is divided into two main categories with regard to disposal management. The treatment **will depend on the nature of the asbestos waste.**

Hazardous waste storage facility (ISDD) or inerting facility by vitrification	Non-hazardous waste storage facility (ISDND)
All types of asbestos waste, including related waste from contaminated construction sites (PPE, protective films)	Construction material waste containing asbestos generated by the construction, renovation or demolition of a building or by the construction, renovation or demolition of civil engineering works, including naturally occurring asbestos-bearing soils and asbestos-containing bituminous asphalt aggregates



## EACH TYPE OF WASTE HAS ITS OWN RECYCLING SYSTEM



INRS document

### Organization to be put in place for the management of this waste

The company must comply with existing regulations concerning the waste it produces or holds, as it is responsible for it. Before work begins, it must obtain a **prior acceptance certificate (CAP)** for the waste storage or vitrification treatment facility for each category of asbestos waste its activity will generate. A **waste tracking form containing asbestos (BSDA)** accompanies each batch from its production site to its final disposal.

At every stage of waste management, handling must be organized to prevent the release of fibers. The use of appropriate handling and lifting equipment should be explored. Surfaces, tools, machinery, and vehicles should be cleaned by wetting and vacuuming with suitable equipment (air blowers are prohibited). Employees must be informed of the risks they face and trained in preventive measures (operating procedures, PPE, hygiene rules).

### Waste disposal

Waste must be entrusted to authorized treatment centers, after requesting a prior acceptance certificate.

**The addresses of asbestos waste storage facilities** can be obtained from the prefectures, the General Councils, the town halls, the DREAL and the ADEME, as well as by consulting the following websites:

<https://www.sinoe.org/>

<http://www.dechets-chantier.ffbatiment.fr/>

## Annex 2: Stakeholder engagement plan

# Stakeholder engagement

Project stakeholders are defined as individuals, formal or informal groups, and organizations and/or government entities whose interests or rights will be affected directly, indirectly, positively, or negatively by the Project and who may have interest and the potential to influence SLLAP outcomes in any way.

The stakeholder engagement strategy for the asbestos management for the construction of the new NLC HQ will comply with the Project's Stakeholder Engagement Plan (SEP), developed in March 2022. This Project will comply with the engagement strategies detailed in the stakeholder engagement process, with the grievance redress mechanism and reporting activities. The SLLAP Project's Stakeholder Engagement Plan (SEP) is designed to guide the processes of engagements, consultations, and disclosure of project information to all relevant stakeholders of the proposed Project.

The following sections are based on the SEP and stakeholder engagement activities that are specific to the scope of this mission.

## Objectives

In compliance with the SLLAP Project's SEP, the purpose of this chapter is to describe the Project strategy and program for engaging with stakeholders in a culturally appropriate manner, encompassing guiding principles on how stakeholders are identified and involved throughout the course of the project, providing information on previous engagements undertaken, prescribing processes and procedures to follow in stakeholder engagement and information disclosure, outlining the responsibilities of relevant institutions and contractors in the implementation of upcoming engagement activities, etc.

The goal is to ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format. It is also to create a process that provides opportunities for stakeholders to express their views and concerns and to allow the Project to consider and respond to them. The involvement of the local population is essential to the success of SLLAP, as it ensures smooth collaboration between project staff and local communities and minimizes and mitigates environmental and social risks related to the proposed project activities. Of significance is the management of stakeholder expectations emanating from SLLAP-related interventions in a socially and culturally sensitive manner to enhance the attainment of the SLLAP objectives.

To achieve these, the **specific objectives** are as follows:

- To identify key stakeholders with role & responsibilities:
  - o for hazardous waste management and asbestos management
  - o for workers protection during the works
  - o at national and at sub-national levels
- To design a strategy to engage these groups in an open dialogue about their concerns & potential involvement for asbestos management (with roles and limitations of each in this communication).
- To inform stakeholders about the asbestos management procedures and planning and their expected inputs, support and assistance; to consult them about their expectations on the

methodology and response and listen to their questions and concerns (to ensure they are addressed in the AMP).

The key steps of the stakeholder engagement for this project are as follows:

- Identify current regulatory obligations related to stakeholder engagement;
- Identify and analyse stakeholders relevant to the Project;
- Map the stakeholders;
- Prepare the stakeholder participation plan;
- Conduct the engagement activities;
- Report on concerns raised by stakeholders and identify the next engagement and preparedness activities required (meetings, trainings, exercises etc.) and adapt the development of the asbestos management methodology accordingly.

## Principles for stakeholder engagement

In compliance with the SLLAP Project SEP, the following principles for stakeholder engagement for asbestos management shall be applied to ensure best practices in this respect:

- Openness and life-cycle approach: Public consultations for SLLAP will be arranged during the whole life cycle, of the project and will be carried out in an open manner and free of external manipulation, interference, coercion, or intimidation,
- Informed participation and feedback: Adequate information will be provided and widely distributed among all stakeholders in an appropriate format. Opportunities will be provided for communicating stakeholder feedback as well as analyzing and addressing comments and concerns,
- Inclusiveness and sensitivity: Stakeholder inclusivity shall be given adequate attention so as to build effective relationships and trust. All stakeholders at all times would be involved in the consultation process. Equal access to information is provided to all stakeholders. Sensitivity to stakeholder needs is the key principle underlying the selection of engagement methods. Vulnerable groups as well as the excluded such as women, youth, elderly, and persons with disability will be given special attention within the context of the appropriate cultural sensitivities of those concern.

## Regulations and requirements on stakeholder engagement

Relevant national laws and policies that promote effective stakeholder engagement and identification during project design and implementation are detailed in the SLLAP Project's SEP (section 2.2). It includes the: Constitution of Sierra Leone, 1991; National Land Policy, 2015; Local Government Act, 2004 (as amended in 2017); Environment Protection Agency, Act 2008 (as Amended in 2010); Town and Country Planning, Cap. 81 (as amended in 2001); Local Content Act, 2016; Right to Access Information Act, 2013; Sexual Offences Act, 2012; Child Rights Act, 2007; National Policy on the Advancement of Women, National Policy on Gender Mainstreaming; and the GBV Referral Protocol.

Regarding international standards, stakeholder engagement in line with the World Bank requirements is associated with ESS10 on Stakeholder Engagement and Information Disclosure (SEID), which recognizes "the importance of open and transparent engagement between the borrower and project stakeholders as an essential element of good international practice". World Bank requirements on stakeholder engagement are developed and detailed in the section 2.1 of the SLLAP Project's SEP.

Guidelines on Asbestos Management in Sierra Leone (2024 draft) states that :

- When asbestos waste is to be generated or removed from a site, parties that may be affected shall be notified on the time and nature of work to be done ;
- The parties to be affected must be given at least seven (7) days' notice of the intention to remove and dispose asbestos by the waste generator ;
- The staff, neighbors and any other person who might be at risk within the premises shall also be notified to prevent their exposure.

## Engagement activities regarding the Project

### Summary of activities for SLLAP

The SLLAP Projects proponents have already carried out a series of stakeholder engagement as part of the preparation as presented in the table 3 in section 4.1 of the SLLAP SEP. During the Project preparation stage, two virtual mission meetings and consultations were conducted with different stakeholder groups pertaining to the Project needs and priorities. Additionally, extensive consultations, including focus group discussions and interviews, were conducted in the context of the preparation of the Project SEP, GBV Action plan and ESMF.

The SLLAP SEP concludes that there was general support for the project as critical for Sierra Leone now. Stakeholders advised the project to involve affected communities right from the planning stage and pay attention to women involvement in key decisions and employment opportunities. Additionally, stakeholders advised the active involvement of the Local Councils during the implementation phase of the project as they interface with the local population and have the technical capacity, with staff to conduct effective monitoring.

### Summary of activities for the construction of the NLC HQ Projects

Engagement activities were carried out for the elaboration of the report “SLLAP construction work - Freetown site Environmental & Social Management Plan (July 2025)”, as detailed in section 9.

Engagements included the following institutions most of which were engaged in Q4 2023: 79

- Environment Protection Agency;
- Freetown City Council (Chief Engineer);
- Representatives of national institutions such as, Ministry of Land Housing and Country Planning, National Water Regulatory Agency, the Fire Force, Sierra Leone Water Company, Ministry of Works & Public Assets and Ministry of Employment Labour and Social Security;
- NGOs such as the National Commission for People Loving with Disability.

Institutional engagements included informing stakeholders about project plans and providing details on the construction of the regional offices. Comments, questions and suggestions from stakeholders were focused on understanding projects plans and proposing solutions for limiting the negative impacts expected during implementation of this sub project. At community level detailed interviews were held with eleven individuals in which they were informed of the sub project and its potential impacts both positive and negative and their perceptions of the sub project were gauged.

Minutes of Meeting for engagement activities with key stakeholders are presented in Annex 5 of the mentioned ESMP. However, it's relevant to note that no mention of asbestos issues can be found in those minutes.

### Activities carried out for the mission kick-off

The following stakeholder engagement activities were undertaken:

**Table 18: Stakeholder engagement activities**

Date	Stakeholder	Engagement Purpose	Engagement Method	Location
24/02/2026	SLLAP PCU	Kick off meeting of the project	Be to Be meeting	MLHCP
25/02/2026	Ministry of Environment Environmental Protection Agency (EPA)	Presentation of SLLAP project Presentation of Antea Scope of Work Questions on Specific regulation/procedure to follow Questions & Answers	Be to Be meeting	MoECC
26/02/2026	Ministry of Health	Presentation of the project Introduction to ACM related risks Specific regulation/procedure to follow for workers and waste Questions & Answers	Be to Be meeting	MoH
23/03/2026	Surveyors from the Ministry of Lands Ministry of Works and a community representative in the New England Community	Presentation of the project Questions & Answers	Be to Be meeting	New England Ville
23/04/2026	Ministry of Employment, Labour and Social Services and the Local Community Headsman	Presentation of the project Questions & Answers	Be to Be meeting	New England Ville
27/04/2026	Fireforce	Presentation of the project Questions & Answers	Be to Be meeting	Tower hill

The lists of presence are presented in Appendix and synthesis of the discussions presented below:

## 25/02/2026 - Ministry of Environment & Environmental Protection Agency (EPA)

### Agenda of the meeting:

- Presentation of SLLAP project
- Presentation of Antea Scope of Work
- Questions on Specific regulation/procedure to follow
- Questions & Answers

### Key points discussed and shared information:

- In terms of regulation, there is no specific regulation related to asbestos management. The EPA Act covers activities related to hazardous waste management
- Specific **Guidelines related to asbestos management are currently under review at the Ministry of Environment for final approval – a draft of the guideline will be shared to SLLAP project**
- Questions were raised related to waste management:
  - Incinerators exist at some private sites and hospital sites (MML, Siera Rutile, Leone Rock, Rogbanban, Kinghoo mining company) but temperature should be verified. Further information related to hospital incinerators will be collected during the meeting with the public health
  - There is no dedicated landfill for asbestos waste in Sierra Leone
  - **The solution to bury the waste at the project site was welcomed by the MoECC and EPA team** as it is reducing the exposure risk during transport and disposal.
- When questions were raised on the technical procedure that will be followed by the Contractor. It was mentioned that the AMP will detail the technical procedure and that the document will be shared with MoECC and EPA.
- Also, the MoECC and EPA team confirm their willingness to participate in the half day training planned by the project.

## 25/02/2026 - Ministry of Health

### Agenda of the meeting:

- Presentation of SLLAP project
- Presentation of Antea Scope of Work
- Questions on Specific regulation/procedure to follow
- Questions & Answers

### Key points discussed and shared information:

- In terms of regulation, there is no specific regulation related to asbestos risk management. However, **the Ministry will share with the project the policy related to healthcare workers** that will need to be followed by the project
- It was mentioned that asbestos management is still a 'Grey area' and welcomed positively the project and its willingness to handle this risk by applying international best practices
- The representative of the Ministry confirmed their interest in the project and willingness to support it (internal staff and university can be involved). They also confirmed their willingness to participate in the workshop related to Asbestos Risk Management and site visit during removal works.

## 23/03/2026 - Surveyors from the Ministry of Lands, Ministry of Works and a community representative in the New England Community

### Agenda of the meeting:

- Presentation of overview of SLLAP project
- Presentation of Antea Scope of Work
- Questions & Answers

### Key points discussed and shared information:

- Stakeholders suggested that it would be better if removal works were restricted to weekends to minimise human exposure. They recommended that removal occur on Saturdays and Sundays when neighbouring offices have reduced occupancy, thereby reducing the number of potentially exposed individuals.
- Most participants were of the view that workers should be provided with appropriate respirators, disposable coveralls, decontamination facilities and that a site induction and awareness session should be organised for all workers involved in asbestos removal, covering safe handling procedures.

### **24/03/2026 - Ministry of Employment, Labour and Social Services and the Local Community Headman**

#### **Agenda of the meeting:**

- Presentation of overview of SLLAP project
- Presentation of Antea Scope of Work
- Questions & Answers

#### **Key points discussed and shared information:**

- Mr Kanu, the Permanent Secretary, noted that the project must obtain an environmental permit before commencing asbestos removal, as Sierra Leone has a legal framework for hazardous waste management, including the Hazardous Wastes and Chemicals Management Regulations.
- Mr Rollings, the Community Headman, expressed concerns that the demolition presented the potential long-term public health impact if fibres are released into the community. They noted that neighbouring buildings host dozens of workers daily who would be at risk. He however noted that the project could serve as a model or pilot for asbestos management in future public infrastructure projects across the country.
- Participants also are of the view that the project develops a comprehensive air monitoring plan during the asbestos removal phase to ensure that fiber levels remain within acceptable safety limits

## **Stakeholder identification and analysis**

A key element is the identification of stakeholders, their involvement (preparedness/ response), their importance (national/ local, key player: supporting/ other), and their interest and potential influence or link to the project.

Most stakeholders were already identified through:

- Inputs from project personnel and local expert knowledge and experience;
- ESMP conducted for the Project;
- SEP conducted for the Project;
- Site visits and stakeholder meetings.

In a global way, the SLLAP Project SEP presents categories as such: identified stakeholder groups are at both external and internal project levels, including:

- i). External to core operation of SLLAP: This include institutions, communities (in particular that will be identified on the long list and included in the shortlist), national, provincial, and local government authorities, non-governmental and other civil society organizations, local

institutions (such as customary and non-customary institutions) and other interested or affected parties; and

- ii). Internal to core operation of SLLAP: These are land owning families, paramount chiefs and chiefdom councils, women groups, suppliers, contractors, distributors, and regulators.

The complete list regarding the whole SLLAP Project's stakeholders is provided in Table 1/section 3.2 of the SLLAP SEP.

The current stakeholders and categories identified are presented in the following table.

**Table 19 : List of stakeholders relevant to the Project**

Authorities	Civil Society	Business/ private activities	Directly Affected Groups
<b>Key stakeholders</b>			
<ul style="list-style-type: none"> <li>- Environment Protection Agency (EPA)</li> <li>- Ministry of Employment, Labour and Social Security</li> <li>- Ministry of Works and Public Assets (MWPA)</li> <li>- SLLAP PCU</li> <li>- Local Councils (City/Local Council Officials/Ward Committees)</li> </ul>	<ul style="list-style-type: none"> <li>- Fire force</li> </ul>	<ul style="list-style-type: none"> <li>- Contractors</li> </ul>	<ul style="list-style-type: none"> <li>- Communities in the vicinity of the site</li> </ul>
<b>Other stakeholders</b>			
<ul style="list-style-type: none"> <li>- National Disaster Management Agency (NDMA)</li> <li>- Ministry of Environment</li> <li>- Ministry of Health</li> <li>- Freetown City Council Office of Administrator and Registrar General</li> <li>- SALWACO, National Water Resources Management Agency</li> <li>- Ministry of Gender and Children's Affairs</li> </ul>	<ul style="list-style-type: none"> <li>- Sierra Leone Land Alliance</li> <li>- Media</li> </ul>		

## Stakeholders prioritization

Stakeholders are classified according to two criteria typically used in stakeholder mapping exercises, adapted to asbestos management:

- Their level of influence (i.e. ability to block or facilitate the project);
- Their level of potential interest, expectations or fears with regard to the Project.

Criteria for stakeholder analysis are provided in the SLLAP Project SEP at section 3.2.

The rating scale is outlined in the table below. The determination of the rating for each stakeholder is based on the following approaches:

- Empirical approach: for the level of interest, the positions or opinions already expressed by the stakeholder publicly was studied. For the evaluation of the level of influence, elements such as the hierarchical positioning of an authority, the international influence of an NGO ...
- Expert opinion: in the absence of information on opinions or positions already expressed by the stakeholder, the Consultant has drawn on his experience on other similar projects to best assess the stakeholder's potential position. An expert opinion is based on an analysis of secondary sources and knowledge of local issues acquired through past projects.

**Table 2: Criteria for assessing levels of stakeholder influence and interest**

	Influence or power	Interest
1	The stakeholder has very little influence.	The stakeholder's level of interest is low or non-existent.
2	The stakeholder has little influence but represents a strategic interest for the project.	The stakeholder shows interest in the project's activities but has little or no impact on the project.
3	The stakeholder has the capacity to positively or negatively influence other key stakeholders and impact the project.	The stakeholder is impacted by the project but expresses limited interest, concerns or expectations.
4	The stakeholder can directly block operations and/or withdraw the project's social license to operate.	The stakeholder is clearly impacted by the project and regularly expresses interest, concerns or expectations.

Considering the SLLAP Project as a whole, section 3.3 of the SLLAP SEP provides analysis for interest and influence for every stakeholder identified.

However, the result of mapping for the specific analysis regarding the construction of new HQ for NLS is presented below:

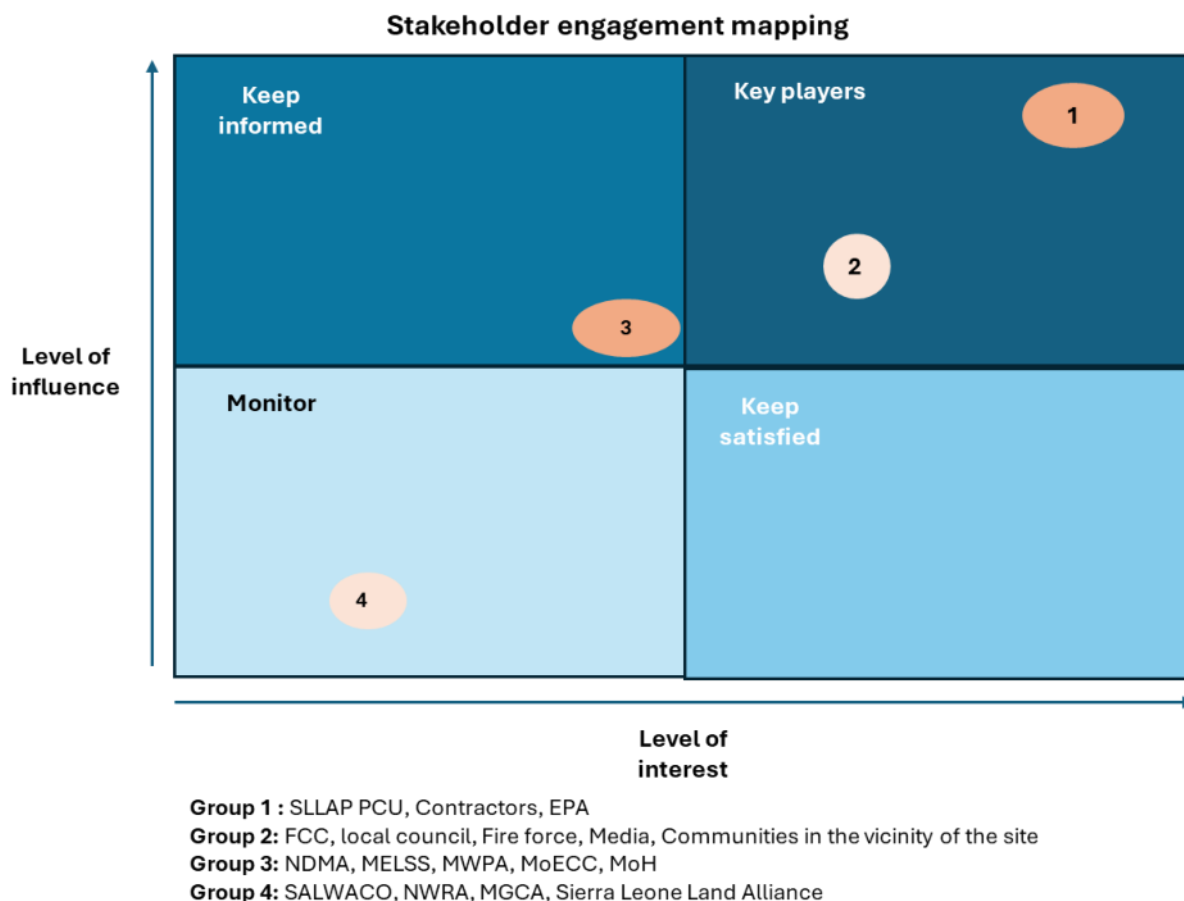


Figure 15. Stakeholder mapping

## Engagement strategies and activities

The engagement activities will aim to understand the stakeholders' potential concerns, needs, and expectations related to the Project and collecting their inputs to build the Asbestos Management Plan.

### Methodology and tools

Different forms of dialogue may be required, depending on the stakeholders, the subject to be addressed, the number of people to be involved, the organization's or group's history of interaction with the Project, the objective sought (sharing/informing, consulting/dialoguing, negotiating, involving), and so on.

Information should be provided to stakeholders in a format particularly suited to them, in their language, taking care not to use overly technical language or providing assistance in interpreting complex technical information.

Wherever possible, MLHCP favours dialogue with stakeholders directly, through physical meetings, but dialogue can also take place through legitimate and credible representatives or by using remote means of communication.

In compliance with SLLAP SEP, stakeholder engagement can be achieved using one or more of the techniques listed below:

Table 20 : Engagement methods (SLLAP SEP, 2022)

Engagement Method	Purpose & Details
Correspondence (Phone, Emails)	Distribute information to World Bank Group, Government officials, NGOs, Local Government, impacted communities & organizations/agencies Invite stakeholders to meetings and follow-up
One-on-one Meetings (via Zoom, Skype, Teleconference, etc.)	Seek views and opinions Enable stakeholders to speak freely about sensitive issues Build personal relationships Record meetings Resolve concerns & grievances as appropriate
Formal & Informal Meetings	Present Project information to group of stakeholders Allow group to comment – opinions & views Build impersonal relation with high-level stakeholders Disseminate technical information Record discussions
Focus Meetings	Group Present project information to group of stakeholders Allow stakeholders to give views on targeted baseline information Build relationships with communities Record responses
Website/National Newspapers	Present project information & progress updates Disclose ESIA, ESMF, ESMP, RPF, SEP & other relevant project documentation
Direct Communication with Affected PAPs	Share information on project impacts & mitigation measures & implementation timelines Agree on options for neighbourhood upgrade & relocation options Participatory development of community action plans
Public Meetings	Present project information to large groups of stakeholders, especially communities Allow groups to give views & opinions Build relationship with communities, especially the impacted Distribute non-technical information Facilitate meetings with presentations, PowerPoints, posters, brochures, etc. Record discussions, comments & questions

## **Methods of Consulting Disadvantaged / Vulnerable Individuals or Groups**

Methods for consulting disadvantaged/vulnerable individuals or groups is detailed in Table 5 at section 4.3 from the SLLAP SEP. All engagement activities realized for asbestos management will comply with these methods.

In short, SLLAP will seek the views of vulnerable and disadvantaged groups during consultations, in a confidential manner to take their views into account during Project implementation. Information sharing and consultation techniques will be tailored according to the nature and common types of stakeholders, for example through visuals and sign language interpreters will be used for people with hearing disabilities and illiterate persons, where applicable; and venues will be chosen to be easily accessible to people with physical disabilities.

### **Details on engagement activities**

Engagement activities are presented below:

Table 21 : Engagement strategies and activities

Objectives	Engagement techniques	Stakeholder concerned	Responsibility	Calendar
Preparation of AMP				
Present the project and gather concerns/ expectations	Individual meetings	Key authorities Fire force	Consultant	During AMP preparation
Present AMP and describe management measures	Leaflets, posters	All	SLLAP PCU	Once AMP is validated
Inform about works planning and health and safety measures for communities	Leaflets, posters Boards at construction site	Communities in the vicinity of the site	SLLAP PCU	2 weeks prior to the works
GRM establishment, dissemination, and awareness	Individual meetings	Contractors (workers) Communities in the vicinity of the site	SLLAP PCU Ministry of labour	2 weeks prior to the works
Works phase				
Inform about progress of work and implementation of safety measures	Boards at construction site	All	SLLAP PCU /Contractor	Continuously
Reporting on health, safety and environmental measures once the works are completed	Reporting	EPA	SLLAP PCU /Contractor	Two weeks after end of works

## Grievance mechanism

A Grievance Redress Mechanism (GRM) has also been incorporated into the SLAPP global SEP where project related grievances will be resolved using laid down procedures. The GRM will be accessible and understandable for all stakeholders in the project and for the entire project life. This section summarizes details of GRM provided in SLLAP SEP section 6.

The construction project will utilise the grievance procedures outlined in the SLLAP GRM to handle grievances and complaints from project-affected parties. These procedures will be applied to ensure workers' and stakeholders' grievances while constructing the NLC office building and associated infrastructure are addressed.

Globally, the GRM will be instituted by the PCU before the commencement of project implementation to enable a broad range of stakeholders to channel their concerns, questions, and complaints to the various implementation agencies, through multiple grievance uptake channels. Particularly, the GRM will have a trained specialist to address any related issues and complaints. This will address RFP, SEP, ESMP and GBV complaints.

The contractors are expected to have a GRM in place for their workers and communities. Community focal points at village level and grievance redress committees at Districts and national levels will be trained to receive and refer GBV related complaints to a GBV Service Provider hired by the project. For the construction of NLC HQ, the contractor's assigned Occupational Health, Safety, and Environment Officer and Liaison Officer at the construction site will receive, register, and report workers' grievances, complaints, incidents, and accidents.

Essentially, the GRM will assist in resolving complaints and grievances in a timely, effective, and efficient manner that satisfies all parties involved. It outlines a transparent and credible process for fair, effective, and lasting outcomes. Similarly, it builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions. Specifically, the GRM will:

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

The GRM will include the following steps:

- Receiving and registering a complaint;
- Screening and investigating the complaint;
- Formulating a response;
- Selecting a resolution approach;
- Implementing the solution;
- Announcing the result;
- Tracking and evaluating the results;
- Learning from the experience and communicating back to all parties involved; and
- Preparing timely reports to management on the nature and resolution of grievances.

A Grievance Redress Committee shall be established to ensure timely and appropriate resolution of grievances arising as a result of project activities. The coordination responsibility of the GRM shall rest with the Social Safeguards and Gender Specialist with support from the Community Engagement and

Communications Specialist in addition to focal persons in the affected communities, contractor and supervising teams and service providers (for SEA/SH complaints) or directly through a call/report center (Toll free line). Complaints can be registered through multiple accessible channels including phone calls, text messages, emails or voice mail, letters, verbal narration, reports during field visits, media reports, and suggestion boxes etc. at all project sites and communities.

The GRM implementation process steps which are summarized in table 9 in section 6.3 of SLLAP SEP. Table 10 details stakeholder roles and responsibilities in GRM processes.

Recently, toll-free lines number 840 for Africell, Qcell and Orange have been activated. Grievance Redress Committees have been established in Bo, Kenema, Makeni and Port Loko in February 2025. One GRM Focal point will be appointed as part of Field Teams during survey and land title registration. The complaint section of the website has been activated. Members of the public can now lodge complaint through the website. The national GRC has been established and trained. Plans are underway to establish the district level GRC. The district level GRCs will be established during the field work to establish the land committees.

## Roles and responsibilities

The MLHCP will establish a PCU to handle the day-to-day coordination of project activity will provide oversight and supervision in implementing the SEP. The MLHCP- PCU will also ensure the hiring of the required personnel to implement the project including the roll out of activities related to SEP, i.e., a Community Engagement and Communications Specialist who will work closely with a Social and Gender Specialist and an Environmental Specialist. In addition, the MLHCP will ensure that the required funds are allocated and disbursed for the implementation of the SLLAP SEP.

The resources for the implementation of the SEP will be sourced from the Government of Sierra Leone GoSL and from Component 4 of the project which made budget provisions to cover costs associated with overall project coordination including communication and outreach to stakeholders. SEP budget details are provided in section 5.1 (Table 9) of SLLAP SEP.

## Monitoring and reporting

In compliance with SLLAP SEP, a SLAPP project monitoring and evaluation system will be established by the PCU-MLHCP to assess progress on indicators in the Project's results framework. Data on activities and outputs will be included in regular monthly and quarterly reports prepared by the PCUs based on inputs from the implementing agencies, including MDAs' focal points and at the local councils' level, in accordance with the format in the Project's Implementation Manual (PIM).

The MLHCP shall provide overall coordination, monitoring, and evaluation of the project by putting in place the requisite tools and systems (GRM section on relevant websites, M&E systems, reporting templates, etc.) in place to collect, analyse, and report all information to relevant stakeholders.

The stakeholder engagement strategy will be periodically revised and updated as necessary in the course of project implementation in order to ensure that the information presented herein is consistent and is the most recent, and that the identified methods of engagement remain appropriate and effective in relation to the project context and specific phases of the development. Any major changes to the project related activities and to its schedule will be duly reflected and communicated to key stakeholder of the project in a timely manner.

Key Performance Indicators (KPIs) will be monitored by responsible staff and monthly summaries and internal reports on public grievances, enquiries, related incidents, together with the status of implementation of associated corrective/preventative actions generated and conveyed to the World Bank and all other relevant stakeholders. Publication of status/annual report on stakeholder

interaction on the project among others shall constitute one of the possible ways of conveying information to stakeholders.

KPIs for stakeholder engagement regarding asbestos management are the following:

**Table 22 : Stakeholder engagement KPIs for the Project**

Indicator	Frequency	Methodology for data collection	Responsability for data collection
Number and type of stakeholder identified	Monthly	Stakeholder list	MLHCP &C/LCs
Number of consultations carried out with key stakeholders before and during project implementation	Monthly	Stakeholder consultation reports	MLHCP
Number and types of grievances recorded as a result of project activities	Monthly	GRM reports	MLHCP
Number of successful resolutions of concern and complaints related to project affected person	Monthly	GRM reports	MLHCP

## MINUTES OF THE STAKEHOLDER ENGAGEMENT MEETING

Date:	March 2026	Time:	14:00 to 15:30
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Subjects covered
<ol style="list-style-type: none"> <li>1. Presentation of the project and asbestos management context.</li> <li>2. Observations and inputs from stakeholders.</li> <li>3. Suggestions and recommendations from stakeholders.</li> <li>4. Stakeholder support and project appreciation.</li> </ol>

Discussion on the subjects
<p><b>Presentation of the project and asbestos management context</b></p> <ul style="list-style-type: none"> <li>• The team presented an overview of the SLLAP, highlighting the objective to establish an efficient land administration system. The presentation focused on Component 1, which involves the construction of a four-story administrative building for the National Land Commission Headquarters.</li> <li>• The team detailed that during the preparation phase, asbestos-containing materials (ACM) were identified in the roof of the existing building slated for demolition. The project team explained the health risks associated with asbestos fibers and the requirements under the World Bank's Environmental, Health, and Safety (EHS) Guidelines. It was clarified that an Asbestos Management Plan (AMP) is being developed to ensure the safe handling, removal, and disposal of the asbestos, with a primary focus on public health, workplace safety and environmental protection.</li> </ul> <p><b>Observations and inputs from stakeholders</b></p> <ul style="list-style-type: none"> <li>• The project must obtain an environmental permit before commencing asbestos removal as Sierra Leone has a legal framework for hazardous waste management, including the Hazardous Wastes and Chemicals Management Regulations.</li> <li>• Expressed concern about the potential long-term public health impact if fibers are released into the community. They noted that neighboring buildings host dozens of workers daily who would be at risk.</li> <li>• Project could serve as a model or pilot for asbestos management in future public infrastructure projects across the country.</li> </ul>

**Suggestions and recommendations from stakeholders**

- Conduct weekend removal works to minimize human exposure. Recommend that removal occur on Saturdays and Sundays when neighboring offices have reduced occupancy, thereby reducing the number of potentially exposed individuals.
- Workers should be provided with appropriate respirators, disposable coveralls, decontamination facilities and organize a site induction and awareness session for all workers involved in asbestos removal, covering safe handling procedures.
- Develop and implement a public communication plan, including public notifications in the project area prior to commencement of asbestos removal.
- The project develops a comprehensive air monitoring plan during the asbestos removal phase to ensure that fiber levels remain within acceptable safety limits.

**Stakeholder support and project appreciation**

- All stakeholders expressed their delight and support for the overall project, recognizing that the new headquarters will significantly improve the working environment for land administration staff and contribute to better planning and service delivery. Stakeholders commended the project team for initiating engagement early and committed to providing continued support throughout implementation.



# Attendance Sheet



Project: Preparation of Asbestos Management Plan (AMP) and Supervision of its implementation

Date: 2/24/2026

Venue: MLHCP

Meeting: Kick-off Meeting

## Participants

No.	Full Name	Organization / Department	Role / Function	Signature
1	Kelvin Vandi	Lands Survey Assistance	Survey Assistance	
2	Fatmata Conteh	Lands	Surveyor	
3	Osmond Komorer	Lands	Surveyor	
4	Vandi Bockarie	Works	Admin	
5	Zainab Kamara	Works	Admin	
6	Daud Tholley	Community	Elder	
7				
8				
9				
10				



# Attendance Sheet



Project: Preparation of Asbestos Management Plan (AMP) and Supervision of its implementation

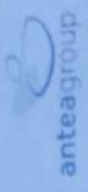
Date: 24/02/2026

Venue: MLHCP

Meeting: Kick-off Meeting

## Participants

No.	Full Name	Organization / Department	Role / Function	Signature
1	Joseph T. Kanu	MELSS	Senior Perm. Secretary	
2	Hon Sirgin Rolling	Community Lead	New England Ville	
3				
4				
5				
6				
7				
8				
9				
10				



# Attendance Sheet

Project : Preparation of Asbestos Management Plan (AMP) and Supervision of its implementation

Date: 2/24/2026  
 Venue: MLHCP  
 Meeting: Kick-off Meeting

## Participants

No.	Full Name	Organization / Department	Role / Function	Signature
1	Brima Koroma	Fire Force	Fire officer	<i>[Signature]</i>
2	Sulaiman Conteh	National fire force	Fire officer	<i>[Signature]</i>
3	Foday Kamara	Fire force	Fire officer	<i>[Signature]</i>
4				
5				
6				
7				
8				
9				
10				

## Annex 4: Waste tracking example

# Waste tracking form

- To be completed by the waste producer -

<b>1. Waste producer (Client)</b>	
Company name:	Contact person:
Address:	Tel / Email:
<b>Prior Acceptance Certificate No.:</b>	
<b>2. Waste description</b>	
<input type="checkbox"/> Non hazardous waste (OIW) <input type="checkbox"/> Contaminated soil <input type="checkbox"/> Drilling spoil <input type="checkbox"/> WEE <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Contaminated waste (SIW) <input type="checkbox"/> Rubble <input type="checkbox"/> HC sludge <input type="checkbox"/> VLLW	
Waste consistency	O Probe      L Liquid      Q Muddy
<b>3. Waste packaging</b>	
<input type="checkbox"/> Skip <input type="checkbox"/> Tank <input type="checkbox"/> IBC <input type="checkbox"/> Drum <input type="checkbox"/> Other (specify): .....	
<b>4. Quantity</b>	
Q Rhuis	Estimated      (Rigid) <i>f</i> m <sup>3</sup>

- To be completed by the collector-transporter -

<b>0. Collector-transporter</b>	
Company name:	Mode of transport:
Address	Date of handover* to carrier:
<b>Your email address:</b>	
<b>Manager</b>	

- To be completed by the waste producer -

<b>8. General declaration by the waste producer (Client)</b>	
The undersigned certifies that the information provided in the fields above is accurate and that the weight is correct	Signature and stamp:
NAME:	Date:

- To be completed by the destination facility -

<b>7. Consignment received at the destination facility</b> Company name . Address : Contact person: Actual quantity received :      Tonnes (%) Date of receipt: Batch accepted      Yes or No % of total returns:  Name of signatory:      Signature and stamp:	<b>8. Completion of the operation</b>  I hereby certify that the transaction described below has been carried out.  Name of signatory Date:                      /                      Signature and stamp.
--	---

## Annex 5: Example of incidents/accident report



	<b>ACCIDENT REPORT / INCIDENT / HAZARDOUS SITUATION</b>	Reference: XX
		Date: XX/XX/202
		Index:
		Page: 1/3

Investigation of causes		
<b>Human:</b> <input type="checkbox"/> Instructions not followed <input type="checkbox"/> Risky behaviour <input type="checkbox"/> Routine <input type="checkbox"/> Fatigue <input type="checkbox"/> Rushing <input type="checkbox"/> Other:.....	<b>Equipment</b> <input type="checkbox"/> Inadequate protection <input type="checkbox"/> No protective equipment <input type="checkbox"/> Poor condition of equipment <input type="checkbox"/> Other: .....	<b>Environment</b> <input type="checkbox"/> Disorder <input type="checkbox"/> Insufficient lighting <input type="checkbox"/> Weather conditions <input type="checkbox"/> Clogged floor <input type="checkbox"/> Other:.....
<b>Procedure/rules</b> <input type="checkbox"/> No instructions <input type="checkbox"/> Other .....	<b>Hazardous activities</b> <input type="checkbox"/> No personal protective equipment <input type="checkbox"/> Inappropriate method	<b>Other:</b>

<b><u>Establishment of a root cause analysis</u></b> (contact the HSE representative and/or HSE coordinator) <input type="checkbox"/> <b>Required</b> <input type="checkbox"/> <b>Not required</b>
---

**Severity assessment:** tick the appropriate box based on the severity of the incident and the likelihood of exposure;

**Priority 1** Work site shutdown, **immediate** rectification  
 **Priority 2** Process improvement / **corrective or preventive action deadline = 15 days**  
 **Priority 3** Process review following analysis / **deadline for corrective or preventive action = 1 month**

Severity level

Very serious	4				
Serious	3			Priority 1	
Moderate	2		Priority 2		
Low	1	Priority 3			
		1	2	3	4
		Very unlikely	Unlikely	Likely	Very likely

*Probability level*

<b>SEVERITY LEVEL</b> 1- Low – Accident or illness without time off work or damage without repairs  1- Very unlikely – Exposure approximately once a year 2- Medium – Accident or illness resulting in time off work or damage requiring repairs 3- Serious – Accident or illness resulting in permanent partial disability or compensation	<b>PROBABILITY LEVEL</b> 1- –Very unlikely – Exposure approximately once a year 2- - Unlikely – Exposure approximately once a month 3- - Likely – Exposure occurring approximately once a week 4- - Very likely - Daily or permanent exposure
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Actions or measures to prevent recurrence (to be included in the action plan)		
	Responsible	Deadline

Measures implemented on: \_\_\_\_\_ Observation made by: \_\_\_\_\_ Signature: \_\_\_\_\_

**Report drawn up and/or reviewed by:**

SURNAME				
FIRST NAME				
POSITION				
DATE				
SIGNATURE				

*This document must be submitted to the HSE representative in order to be processed.*

	<b>ACCIDENT REPORT / INCIDENT / HAZARDOUS SITUATION</b>	Reference: XX
		Date: XX/XX/202
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**CAUSE TREE (in the event of an accident or a significant near-miss)**