TERMS OF REFERENCE

CONSULTANCY SERVICE FOR THE PREPARATION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR SELECTED E-WASTE PILOT SITES (GH-EHPMP-348465-CS-CDS)

1.0 BACKGROUND

The informal, unsafe, and unregulated nature of mercury use in the ASGM Sector creates a legacy of severe adverse and irreversible environmental and health damage in its wake. It is therefore a priority to reduce, and where feasible, eliminate mercury use in artisanal and small-scale gold mining as required in Article 7 of the Minamata Convention. Current crude methods of handling mercury to process gold lead to release of mercury into the environment with limited controls, leading to occupational and community exposures. The improper recycling and disposal of heavy metals associated with the burning of e-waste is particularly acute in Africa where environmental monitoring and regulatory enforcement are relatively weak. The mismanagement of toxic releases from open-burning and other management sources along the e-waste value chain present serious threats to human and environmental health in Ghana.

For e-waste, the project will support technologies to reduce uPOPs by preventing uPOPs precursors such as plastic and electronic wastes being mixed with municipal and organic wastes that are subject to open burning and consequently causing emissions of uPOPs. Unregulated combustion will be better controlled by improving the separation, segregation, recycling of municipal and hazardous waste. Waste separation technologies will allow separation of the waste components such as plastics, metals, electronic cables and wires etc. For mercury abatement, technologies to promote phasing out of mercury usage will be introduced. The focus will be on promoting alternative technologies for gold extraction without the use of harmful chemicals. Possible technologies to avoid the use of mercury in ASGM include slucing, direct smelting, improved milling, shaking table, reactivation, centrifuges etc.

The *Environmental and Social Framework (ESF)* enables the World Bank and Borrowers to better manage environmental and social risks of projects and to improve development outcomes. The ESF offers broad and systematic coverage of environmental and social risks covering areas such labor standards; transparency; non-discrimination; disability; public participation; and accountability—including expanded roles for grievance mechanisms.

Ghana is one of five African countries participating in the GEF-funded Africa Environmental Health and Pollution Management Program, whose objective is to reduce exposure to Unintentionally Persistent Organic Pollutants (uPOPs) pollution in e-waste pilot sites.

The Project in Ghana has four (4) Components as follow:

Component 1: Institutional strengthening, capacity building and knowledge sharing

The component will strengthen the knowledge and capacity base of public institutions and private stakeholders to address environmental health risks associated with mercury use in ASGM sector and POPs/UPOPs releases from e-waste.

Component 2: Support policy dialogue and regulatory enhancements

The component seeks to address current policy challenges as well as to strengthen regulatory frameworks and facilitate their implementation, to better address environmental health risks associated with mercury use in ASGM sector and POPs/UPOPs releases from e-waste. It complements activities under component 3, focused on operational-level approaches to incentivize practices and technologies less harmful to human health and the environment.

Component 3: Demonstrating the application of technological tools and economic approaches

The component will finance specific community-focused cleaner technology demonstration activities in contaminated areas, selected and designed based on environmental health risks and cost-effectiveness of interventions. The objective is to address technical and methodological challenges to the adoption and deployment of cleaner technologies and practices in complement to activities under component 2, which focuses on challenges and policy incentives to reduce environmental and health pressures.

Component 4: Project management

This component will cover the cost for project management, implementation and supervision of project activities, administration of procurement and financial management, monitoring and evaluation, and monitoring of safeguards compliance. The component will cover in particular the cost of the Project Implementation Units (PIU) within the EPA.

2.0 OBJECTIVES OF THE ASSIGNMENT

The specific interventions under component 3 will have adverse environmental and social impacts. The screening of the potential sites for the pilot investments recommended the preparation of an environmental and social management Plans (ESMP) to mitigation risks to any anticipated environmental and social impacts, minimal as they may be, arising from the implementation of the interventions. In the above context, the Client (EPA) is looking for a consultant to prepare ESMP for the pilot investment sites that meet World Bank and national requirement.

3.0 SCOPE OF ASSIGNMENT AND KEY ACTIVITIES/TASKS

The scope of the assignment will cover the following six (6) e-waste sites as provided in the table below.

No.	Name of Site	District	Region
1.	Tema Metro Sites	Tamale	Northern

2.	Tamale Twonship	Tamale	Northern
3.	Sunyani (UENR)	Sunyani	Brong Ahafo
4.	Ada	Ada West – Sege	Greater Accra
5.	Apedwa	Suhum	Eastern
6.	Boankra	Ejisu-Juaben	Ashanti

The specific scope of activities for the assignment will be executed as follows:

3.1. Preparation of Site-Specific Environmental and Social Management Plan (ESMP)

The consultant will be required to identify and assess environmental and social risks and impacts associated with proposed activities under Component 3 which will require mitigation measures. This will help to ensure that the project activities are environmentally and socially sound and sustainable, the ESMP shall be complicated by the project Stakeholder Engagement Plan (SEP) and Environmental and Social Commitment Plan (ESCP). The Consultant will therefore be expected to prepare, as needed, site-specific Environmental and Social Management Plan (ESMP). The assessment should ensure that adverse socio-economic impacts of the pilot intervention activities on Project Affected Persons (PAPs) including labor, community people, and impacts and risk due to associated facilities are adequately identified and mitigated, and the PAPs are not worst off as a result of project interventions.

The following specific task or activities shall be taken into consideration.

Task 1: Prepare a Comprehensive Description of the Proposed Project

The Consultant will liaise with client for information/data to prepare a detailed description of the proposed activities. The description should be illustrated with maps, plans, diagrams and photographs as necessary.

Task 2: Field studies or investigations

The Consultant will undertake specialized studies for purposes of establishing the baseline and predicting potential impacts. The Consultant will consider undertaking the following field studies or investigations, among others:

- Stakeholder engagement: Conduct consultation meetings and Focus Group Discussions
 with the stakeholders including beneficiary/affected communities as transport owners,
 operators and associations, residential structure loser, roadside shop owners and
 employees, industrial owner and employees, female group etc.
- Socio-economic survey: Conduct a survey to assess the socio-economic conditions of the project area. Identify population's characteristics for demographic and economic analyses, educational and manpower planning, poverty studies. Identify sociodemographic variables include, for example, age, sex, education, migration background and ethnicity, religious affiliation, marital status, household, employment, and income.

- Flora and Fauna (biological) Assessment: Carry out an ecological (flora and fauna) survey of the site and the surrounding area to establish the baseline for natural habitat in the area.
- Hydrological Assessment: Conduct a hydrological assessment to assess the preconstruction and post-construction hydrological features and impacts of the proposed pilot interventions to determine the area's runoff and how it will affect highway operations and surroundings. This assessment will help guide the design to prevent flooding or storm-water accumulation. Determine the potential impacts of the project activity on surface water bodies in and around the vicinity of the site; determine the potential impacts of the proposed activity on storm water flow and assess the quality of surface water bodies in accordance with the Ghana Standard for the Environment Protection Requirements for Effluent discharge (GS 1212:2019).
- Air Quality Assessment: Assess the occupational and public health and safety implications of air quality deterioration (odour, dust releases, PM₁₀) arising from the project activity at the site, in accordance with both the Ghana Standard for Environment and Health Protection Requirements for Ambient Air Quality and Point Source/Stack Emissions (GS 1236:2019) and IFC General EHS Guidelines, 2007.
- Noise Impact Assessment: Conduct noise impact assessment to estimate potential
 impact on the existing ambient noise condition at the proposed site and its environs in
 accordance with both the Ghana Standard for the Health Protection Requirements for
 Ambient Noise Control (GS 1222:2018) and Acoustic Guide for measurement of
 outdoor A-weighted Sound Levels (GS 1253:2018) and IFC General EHS Guidelines,
 2007.
- Traffic Impact Assessment: To assess the impacts of the activities associated with the site on the transport network and identify reasonable solutions to address these impacts.
- Occupational Health and Safety Assessment: To identify hazards and risks and recommend mitigation measures to prevent such risks.
- Water and sediment quality assessment: This should typically be assessed through laboratory testing, including heavy metals. The suite of laboratory tests carried out should reflect the likely contaminants that may be found in the surface water and sediments.
- Cultural and heritage assets assessment studies. Conduct surveys and consult with local
 cultural and archaeological authorities to identify the existence of tangible and
 intangible cultural and heritage assets, to assess the extent to which the Project
 interventions may impact these cultural assets and to provide guidance to ensure the
 proper management of these sites and places during the Project implementation.

Task 3: Analysis of legislation, regulations and institutional frameworks

The Consultant will review relevant policies, legislation, regulations, and institutional frameworks which are applicable to (or have implications for) the proposed project activity. The Consultant

will discuss the legislation and regulations that have informed the ESMP, including the environmental assessment and permitting process. It is important that the Consultant discusses the applicability of existing standards/guidelines relating to ambient air quality, surface and groundwater quality, ambient noise, and solid waste disposal (including the disposal of contaminated hazardous materials). The Consultant will also review the World Bank's Environmental and Social Framework and Standards which apply to the activities. The Consultant will formulate recommendations on how to close gaps that might exist between Ghana's environmental policies, laws, regulatory and institutional frameworks and the World Bank's Environmental and Social Framework and Standards.

Task 4: Baseline Characterization

The Consultant will collect as much primary physical and biological environmental and socio-economic baseline data/information as relevant to the ESMP, supplementing the information with available secondary data as necessary. It is important that the Area of Influence (AoI) of the proposed activities is well defined. The environmental and social baseline study would include a description of the current state of the environment in the AoI, focusing on those aspects that can influence and be impacted by the proposed activity.

Task 5: Identification and Analysis of Alternatives

The Consultant will propose alternatives in the course of exploring additional options for the proposed activity. The alternatives should be compared in terms of potential environmental and social impacts. To the extent possible, quantify the costs and benefits of each alternative, incorporating the estimated costs of any associated mitigation measures. Identify the preferred alternative and provide a justification for the selection.

Task 6: Identification and Assessment of Potential Impacts and Recommended Mitigation

The Consultant will identify and assess potential environmental and social impacts of the proposed activity at the proposed site. Impacts emanating from the Construction/Development, Operational and Decommissioning phases of the site shall be predicted. Significant potential environmental and social impacts (direct and indirect) must be identified, making use of impact identification methodologies proposed in the scoping report. Impact identification should take into consideration factors such as expectations or concerns of stakeholders, ecological sensitivity of the site, likely pressures from the activities, and the applicable legislative framework.

The Consultant shall propose measures aimed at avoiding, minimizing or mitigating the adverse impacts at the site. Measures must also be proposed to enhance any positive impacts. These measures must be technically feasible, socially acceptable (i.e., they must consider the views of the main stakeholders, especially residents of nearby communities and potential project-affected-persons) and be cost-effective. The mitigation and enhancement measures should be specifically tailored to the impacts in order to achieve the aim of avoiding or limiting the negative effects of

the proposed activities. Also, the Consultant shall prepare "Chance Find" procedures to be included in the ESIA for use in the event that unanticipated archaeological, historical and sacred sites or materials are encountered during site improvement/construction works at the site.

Task 7: Develop an Environmental and Social Management and Monitoring Programme

The Consultant will prepare an Environmental and Social Management Plan (ESMP). The ESMP will identify the mitigation measures and the actions needed to implement the mitigation and enhancement measures proposed by the ESMP. The ESMP should identify: (i) set of proposed measures to mitigate potentially adverse impacts; (ii) responsibility and timeframe for implementation of each proposed mitigation measure; (iii) cost of implementing the mitigation measures, and (iv) a monitoring program to verify compliance with the recommended mitigation and assess the effectiveness of the measures implemented. This includes identifying site-specific SEA/SH response and mitigation measures based on the risks and impacts identified in Task 7 and in line with guidance on the World Bank's Good Practice Note for Addressing SEA/SH in Investment Project Financing involving Major Civil Works. The ESMP would also contain measures needed to respond to emergency situations that may occur in the course of executing the proposed activities.

Task 8: Training

Training of the project staff and relevant stakeholders on implementation of the ESMP.

4.0 REQUIRED APPROACH

The Consultant is required to undertake desk studies, literature reviews, field visits and primary and secondary data collection exercises, and consultations with various institutions and stakeholders

5.0 REPORTS/OUTPUTS/DELIVERABLES/PAYMENT

The Consultant will report directly to the Project Coordinator. The following outputs and deliverables are expected.

S/N	Description of output	No. of Copies	Period after	Payment			
			Commencement	(%)			
PART 1:							
1.	Inception Report: The inception	Ten (10)	To be submitted	30			
	report will include an outline of a	hardcopies and	within 2 weeks				
	schedule of activities or workplan,	a digital and editable	after signing of				
	study methodology/approach, tools,	copy	Contract				
	stakeholder mapping, assumptions,	on a pen drive shall be					
	and proposed deliverable schedule,	submitted.					
	etc. and submitted to the Client						
	(EPA). More specifically, the						
	following shall be considered.						

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	•	Review of the pertinent			
		regulations, protocols and			
		standards pertaining to the			
		project			
	•	Review the Environmental			
		and Social Standards (ESS)			
		reports pertaining to the			
		hydro-met sites			
	•	Prepare and present an			
		inception report to the Client			
3.	Draft E	SMP one per site and shall	Fifteen (15)	To be submitted	50
	include	the following:	hardcopies and	within 8 weeks	
	•	Undertake public/community	a digital copy	after submission	
		consultation to ensure	on a pen drive shall be	of Progress	
		relevant stakeholders are	submitted.	Report	
		involved in the development			
		of the Environmental and			
		Social Management Plan			
		(ESMP)			
	•	Prepare ESMP report based			
		on the identified			
		environmental and social			
		impacts (direct and indirect,			
		short and long-term and			
		cumulative) associated with			
		the pilot investments			
	•	Develop an Environmental			
		and Social Monitoring Plan			
		by which all mitigation			
		measures recommended in the			
		Environmental and Social			
		Management Plan will be			
		monitored			
	•	Prepare bills of quantities for			
		monitoring, mitigation and			
		impact management.			
4.	•	Final ESMP reports – one per	Thirty (30)	To be submitted	20
		site	hardcopies and a digital	within 2 weeks	
	•	Training of project staff on	copy	after Client has	
		ESMP and relevant	on a pen drive shall be	given approval	
		stakeholders on the ESMP	submitted.	of the Draft	
				Reports.	

All data and reports related to this exercise belong to the Client and the Consultant must seek the consent of the EPA before giving it to any party.

6.0 DURATION OF ASSIGNMENT

The duration of this assignment will be twelve (12) weeks.

7.0 QUALIFICATION REQUIREMENTS AND SELECTION CRITERIA OF FIRM

The assignment will be delivered by a firm with following requirements:

- Minimum of at least 5 years of demonstrated experience in conducting environmental and social assessments.
- Experience of working with government ministries or agencies in the delivery of environmental and social instruments funded by international development agencies, such as World Bank Group, AfDB, EIB, KfW etc.
- Experience preparing World Bank Environmental and Social instruments such as ESMF,
 SEP, ESMP, and gender Assessments.
- Evidence of experience working in Ghana.

The Firm must have the following composition of key Experts (Team Leader, Environmental Specialist, Social Specialist, and Gender Specialist) who should possess at minimum the following:

Team Leader:

- A Postgraduate university degree in Environmental Science/Management/Engineering, Natural Resource Management, Development Planning, Development Studies, Social Science, or any other relevant discipline.
- Minimum 15 years of post-qualification professional experience and track record in the successful implementation of similar assignments.
- Knowledge and experience with World Bank Environmental and Social Framework and safeguard policies.
- Experience leading a team in the preparation of World Bank Environmental and Social Framework instruments such as ESMP, SEP, gender, SEA/SH Assessments
- Proven experience as the team leader or supervisor of at least three (3) successful
 assignments developing Environmental and Social Management Instruments for
 developmental projects funded by the World Bank or other multilateral organization
 standards,
- Competence in managing teams and relationships with clients.
- Ability to deal with sensitive and confidential information in a professional manner.
- Personal attributes include high standards of conduct, respect, flexibility, and sound work ethic.
- Demonstrated skills in facilitation methods for participatory decisions and shared visions with stakeholders.
- Familiarity with the subregion with experience working in Ghana
- Knowledge of environmental and social legislations and policies in Ghana
- Excellent communication and leadership skills

- Excellent inter-personal skills and demonstrated ability to engage with a wide range of stakeholders including government agencies, non-government organizations, civil society, and communities in Ghana
- Responsive and takes personal ownership and accountability to meet deadlines.
- Should possess competencies such as critical thinking, creative thinking, communication, teamwork, team leadership, client orientation, problem-solving and decision-making, negotiation and conflict resolution.
- Strong analytical and presentation skills
- Proficiency in computer application and programs, including Microsoft Office
- Fluency in English (both spoken and written).

Environmental Specialist:

- A Master's degree in Environmental Science/Management/Engineering.
- Minimum 10 years of post-qualification experience in environmental assessment.
- Knowledge and experience with World Bank Environmental and Social Framework and safeguard policies.
- Familiarity with the subregion with experience working in Ghana
- Knowledge of environmental legislations and policies in Ghana
- Excellent inter-personal skills and demonstrated ability to engage with a wide range of stakeholders including government agencies, non-government organizations, civil society, and communities in Ghana.
- Experience in dealing with international organizations.
- Strong analytical and presentation skills
- Proficiency in computer application and programs, including Microsoft Office

Social Specialist:

- A Master's degree in a social science discipline, such as sociology, social work, anthropology, development planning, development studies or human geography.
- A minimum of 10 years of post-qualification professional experience in Social Assessments
- Knowledge and experience with World Bank Environmental and Social Framework and safeguard policies.
- Experience in conducting/dealing with social assessments, involuntary resettlement, gender inequality, GBV, inclusion of vulnerable groups, labor management, community and stakeholder consultations, and grievance redress.
- Familiarity with the subregion with experience working in Ghana
- Knowledge of social legislations and policies in Ghana
- Excellent inter-personal skills and demonstrated ability to engage with a wide range of stakeholders including government agencies, non-government organizations, civil society, and communities in Ghana

- Experience in dealing with international organizations.
- Strong analytical and presentation skills
- Proficiency in computer application and programs, including Microsoft Office

8.0 FACILITIES TO BE PROVIDED BY CLIENT

The Client will provide the following facilities to the Consultant:

- a) Letter(s) introducing the Consultant wherever required in the performance of the assignment.
- b) Any other relevant information required by the consultant that is readily available to the client and within the scope of the assignment.

It should be noted that the Consultant will need to provide all the administrative, technical professional and support staff needed to carry out their services efficiently. The Consultant will also be responsible for providing all other necessary facilities and logistical support for their staff or team(s) engaged, including accommodation, vehicles/transportation, utilities, office supplies and other miscellaneous requirements wherever applicable to render their services.