

Terms of Reference

GENERAL INFORMATION

Title: Mercury-free Gold-Processing Engineering and Building Expert

Project Name: GOLD-ISMIA Project

Reports to: National Project Manager of GOLD-ISMIA

Duty Station: Home Based

Expected Places of Travel: Minahasa Utara and Halmahera Selatan Districts (will be arranged by the project)

Duration of Assignment: 150 working days within 11 months (April 2022 – February 2023)

REQUIRED DOCUMENT FROM HIRING UNIT

	TERMS OF REFERENCE
5	CONFIRMATION OF CATEGORY OF LOCAL CONSULTANT, please select: (1) Junior Consultant (2) Support Consultant (3) Support Specialist (4) Senior Specialist (5) Expert/ Advisor
x	APPROVED e-requisition

REQUIRED DOCUMENTATION FROM CONSULTANT

x	CV or P11
x	Copy of education certificate
x	Completed financial proposal
x	Completed technical proposal

Need for presence of IC consultant in office:

☒ partial (the presence of the consultant will be upon request e.g. field monitoring/reporting/presentation of deliverable)

☐ Intermittent (explain)

☐ full time

Provision of Support Services:

Office space: ☐ Yes ☒ No

Equipment (laptop etc.): ☐ Yes ☒ No

Secretarial Services ☐ Yes ☒ No

If yes has been checked, indicate here who will be responsible for providing the support services: -

I. BACKGROUND

Artisanal and Small-scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment (35%).¹ Mercury can travel long distances, contributing to global mercury pollution and contaminating the world's ecosystems and fisheries. Exposure to mercury may cause serious health problems, and it is a particular threat to the development of the child in utero and early in life.² Phasing-out mercury from the ASGM sector is therefore of the utmost importance. The ASGM sector is, meanwhile, a very important source of jobs and livelihoods, accounting for about 17-20% of the world's annual gold production³ with 15 million people directly participating in ASGM activities⁴ and another 100 million depending on ASGM for their livelihoods.

In the above context, UNDP and the Government of Indonesia [i.e., the Ministry of Environment and Forestry (KLHK – Kementerian Lingkungan Hidup dan Kehutanan) and the Agency for the Assessment and Application of Technology (OR BRIN - Badan Pengkajian dan Penerapan Teknologi)] with the funding from the Global Environment Facility (GEF), are in a five-year partnership to address the issues of ASGM in Indonesia through the implementation of Global Opportunities for Long-term Development of Artisanal and Small-scale Gold Mining Sector (ASGM): Integrated Sound Management of Mercury in Indonesia's ASGM (hereinafter referred to as "GOLD-ISMIA") Project. The GOLD-ISMIA Project Document (Pro-Doc) was signed on 5 September 2018 and the 1st Authorized Spending Limit (ASL) was received on Monday, 29 October 2018.

The objective of the GOLD-ISMIA Project is to reduce/eliminate mercury releases from the Indonesian ASGM sector by:

- i. strengthening institutions and the policy/regulatory framework for mercury-free ASGM;
- ii. increasing the access of mining communities to finance to enable the procurement of mercury-free processing technologies;

¹ UNEP Global Mercury Assessment (2013)

² WHO Fact Sheet No. 361 (2013)

³ Estelle Levin Limited (2014)

⁴ UNEP (2013) The Negotiating Process: <http://www.unep.org/hazardoussubstances/Mercury/Negotiations/tabid/3320/Default.aspx>

- iii. increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization; and,
- iv. raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

In particular, the project will support 6 ASGM communities in Indonesia to reduce mercury use by at least 5 metric tonnes/year starting in year three of the project, which over the lifespan of the project will result in a mercury release reduction of at least 15 tonnes. The 6 ASGM communities are as follows:

- 1. Singigi Sub-District, Kuantan Singingi District, Riau Province
- 2. Kokap Sub-District, Kulon Progo District, Daerah Istimewa Yogyakarta Province;
- 3. Sekotong Sub-District, Lombok Barat District, Nusa Tenggara Barat Province;
- 4. Sumalata Timur Sub-District, Gorontalo Utara District, Gorontalo Province;
- 5. Dimembe Sub-District, Minahasa Utara District, Sulawesi Utara Province; and,
- 6. Obi Sub-District, Halmahera Selatan District, Maluku Utara Province.

Installation of Fixed Mercury-free Gold Processing Plant

To achieve the above-said target, the Project, under Component 3, targets at increasing the capacity of mining communities for mercury-free ASGM through provision of technical assistance and technology transfer. Within this target, the Project will install 1 fixed and 1 small-mobile plant for mercury-free gold processing in Minahasa Utara and Halmahera Selatan Districts, respectively. To ensure that the processing plants are established as planned and in accordance with the approved Detailed Engineering Designs (DED), the Project seeks to engage an individual consultant to provide technical overseeing on the establishment processes at the field.

II. SCOPE OF WORK AND DELIVERABLES

A. Scope of Works and Activities

Under the supervision of the GOLD-ISMIA PMU, the Consultant shall carry out the following works with technical specifications provided by the Project, as follows:

- 1. To evaluate the deliveries report from the pre-establishment of Fixed Mercury-Free Gold Processing Plant for Primary Ore in Talawaan, North Minahasa, and

Establishment of Small Mobile Mercury-Free Gold Processing Plant for Primary Ore in Anggai Village, South Halmahera, and provide analysis and input of the deliverable reports from the awarded contractors of bidding process for establishment of fixed and mobile plants;

2. To prepare the report from the evaluation and liaise communications between the DED designer of the fixed and small-mobile plant and the Contractor prior, during and after the establishment of the plants;
3. To present the report to the GOLD-ISMIA project, and provide overall technical supervisory on the site during the establishment of fixed and small-mobile plants.
4. To perform evaluation on the revision report of establishment fixed and mobile plants; and
5. To prepare the final evaluation on the revision report as the basis for the GOLD-ISMIA project to give the approval on the report of the post-establishment fixed and mobile plants from the contractors.

B. Expected outputs

The main output is that a fixed and small-mobile mercury-free gold processing plant established the designated location. The detailed deliverable are as follows:

Deliverable/Outputs	Target Due Dates	Review and Approvals	Working Days
1st Deliverable: Inception report on the pre-establishment framework of Fixed Plant in North Minahasa and Small-Mobile Mercury-Free Gold Processing Plant in South Halmahera.	June 2022	NPM of GOLD-ISMIA	30 wds
2nd Deliverable: Analysis result on the collected data and first draft of evaluation report on the Establishment Fixed Plant in North Minahasa and Small-Mobile Mercury-Free Gold Processing Plant in South Halmahera (in Bahasa Indonesia).	October 2022	NPM of GOLD-ISMIA	90 wds

3rd Deliverable: Final report on the establishment Fixed Plant in North Minahasa and Small-Mobile Mercury-Free Gold Processing Plant in South Halmahera (in Bahasa Indonesia), including; 1. Presentation and summary report after revision to GOLD-ISMIA project. 2. Submitting the summary report after revision and file storage containing an editable version of the final report and relevant documentations (i.e., presentation files, photos and data collection).	January 2023	NPM of GOLD-ISMIA	30 wds
Total Working Days			150 wds

III. WORKING ARRANGEMENTS

Institutional Arrangement

- The consultant will carry out his/her functions under the direct supervision of National Project Manager GOLD-ISMIA. His/her will work closely with GOLD-ISMIA PMU to ensure effective and efficient infrastructure and civil works reconstruction process.
- Any other tasks that are not included above but during the assignment period later deemed important to ensure the quality of the deliverable could be proposed by the incumbent and shall be agreed jointly.

Duration of the Work

The consultant will perform his/her assignment with the following timeline:

- He/she will have 150 totals of working days from April 2022 – February 2023
- The expected effective working date is started on 1 April 2022.

- He/she should submit the deliverable 1 (one) weeks before the deadline specified in contract to enable the technical officer undertaking proper review within maximum 2 weeks or 14 working days.
- Delay on submitting report will impact on the completion of works and release of payment

Duty Station

The consultant will be home-based with occasional travels to the sites

Travel Plan

Below is an indicative travel plan for the duration of the assignment. The Consultant will be required to travel to the below indicated destinations and it **the related cost will be provided by the project**. There may be also unforeseen travel that will come up during the execution of the contract which will be agreed on ad-hoc basis.

No	Destination	Frequency (during the contract period)	Duration/days (not including travel days)
1	Kabupaten Minahasa Utara	At least 4 times at the following stages: 1. during the preparation stage (prior to the establishment) 2. during the fabrication stage (perhaps at the contractor's workshop) 3. during the running test at the workshop 4. during the establishment stage 5. during the post-establishment stage	2 – 6 days for each travel
2	Kabupaten Halmahera Selatan	At least 4 times at the following stages: 1. during the preparation stage (prior to the establishment)	2 – 6 days for each travel

			2. during the fabrication stage (perhaps at the contractor's workshop) 3. during the running test at the workshop 4. during the establishment stage 5. during the post-establishment stage		
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IV. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

The consultant will be produced outputs based on below schedule:

I. Academic Qualifications:

Minimum Master Degree in Civil Engineering, Environmental Engineering or related fields.

II. Years of experience:

- Minimum of 10 (ten) years experiences in civil works and/or building construction projects.
- Experience in supervising civil works and/or building construction in mining area carry out by developer.
- Experience in liaise and coordinate with government counterparts and private sector in civil works and/or building construction.

III. Competencies and special skills requirement:

- Familiar with governance system, policies and procedure.
- Familiar with providing analysis and reporting related with the establishment process.
- Ensuring the coordination with government and other stakeholders are done with accurate, objective, clear, constructive.
- Facilitating communication between project and other stakeholders during the process.

V. EVALUATION METHOD AND CRITERIA

Individual consultants will be evaluated based on the following methodologies:

Cumulative analysis

The award of the contract will be made to the individual consultant whose offer has been evaluated and determined as:

- a) Responsive/compliant/acceptable, and

b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight; [70%]

* Financial Criteria weight; [30%]

Only candidates obtaining a minimum of 49 point would be considered for the Financial Evaluation

Criteria	Weight	Maximum Point
<u>Technical Criteria</u>	70%	
<i>Criteria A: qualification requirements as per TOR:</i> • Minimum Master Degree in Civil Engineering, Environmental Engineering or related fields. • Minimum of 10 (ten) years experiences in civil works and/or building construction projects. • Experience in supervising civil works and/or building construction in mining area carry out by developer. • Experience in liaise and coordinate with government counterparts and private sector in civil works and/or building construction.		70 15 20 20 15
<i>Criteria B: Brief Description of Approach to Assignment</i> • Understands the task and applies a methodology appropriate • Important aspects of the task addressed clearly • Planning logical, realistic for efficient project		30 10 10 10
<u>Financial Criteria</u>	30%	