



Republic of the Philippines
(Republic Act 7611)

**PALAWAN COUNCIL FOR SUSTAINABLE DEVELOPMENT STAFF
BIDS AND AWARDS COMMITTEE**

Invitation for Negotiated Procurement

PR. No. 19-11-003 (B): Contract of Service for the Study of Mercury on Humans and Wildlife in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City

1. In view of the two (2) failed public biddings, the Palawan Council for Sustainable Development Staff (PCSDS) Bids and Awards Committee (BAC) invites interested bidders to participate in the negotiation for the project, PR. No. 19-11-003 (B): Contract of Service for the Study of Mercury on Humans and Wildlife in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City, in accordance with Section 53.1 of the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (R.A.) No. 9184, otherwise known as the Government Procurement Reform Act;
2. The PCSDS intends to apply the sum of **Nine hundred ninety-six thousand pesos (Php 996,000.00)** pesos being the Approved Budget for the Contract (ABC) to payments under the contract for the project under FY 2020. The funding source is through the authorized appropriations under the National Expenditure Program (NEP) for the succeeding year – Single Year (FY 2020). The terms of reference for the subject procurement is listed in the Annex attached hereto;
3. The PCSDS-BAC will hold a negotiation conference with all interested bidders on **February 11, 2020, 10:00** in the morning at the **PCSD Building, Sports Complex Road, Barangay Santa Monica, Puerto Princesa City, Palawan**. Submission of **“Best Offer/Proposal”** shall immediately follow at **10:30 AM on the same date**.
4. The Eligibility Documents, Technical Proposal and Best and Final Offer stated in the checklist shall be submitted in one (1) original and two (2) duplicate copies;
5. Interested bidders may obtain further information from the PCSDS-BAC Secretariat at the address given below during office hours from 9:00 AM to 4:00 PM;
6. The PCSDS reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of R.A. No. 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
7. For further information, please refer to:

PCSDS BAC Secretariat
PCSD Building, Sports Complex Road, Brgy. Santa Monica, Puerto Princesa City, Palawan
Telephone No. (048) 434-4235
Email address: mitchie592003@gmail.com


Josephine S. Matulac
BAC Chairperson

Vision: Palawan, an innovative and dynamic global center of sustainable development

Mission: PCSDS as the driver of environmental conservation and inclusive development in Palawan, a biosphere reserve and science-for-sustainability site, guided by the Strategic Environmental Plan

HEAD OFFICE:

PCSD Building, Sports Complex Road
Santa Monica Heights, Puerto Princesa City, Palawan, Philippines
Tel No: (+6348) 434-4235 Trunkline*(+6348) 434-4234 Telefax
Email: oed@pcsd.gov.ph *Website: pcsd.gov.ph | www.pkp.gov.ph

METRO MANILA LIAISON OFFICE

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77 West Avenue, Quezon City, Philippines
Tel. No: (+632) 376-2061 / (+632) 376-2775

Terms of Reference

For Lot 1, Contract of Service for the Study of Mercury on Wild Flora & Fauna, and Other Plants & Animals in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City

I. Background

The remnants from former quick silver mine in Bgy. Sta Lourdes, Puerto Princesa City has created worries on the residents of the community as well as of nearby barangays. Previous and recent studies on mercury levels in different environmental samples were conducted in direct impact area, as well as the surrounding barangays. Studies showed elevated levels of mercury in water and sediments in Honda Bay (Kapauan et al. 1982; Gray et al. 2003). Abrahamsson and Ekelund (2014) investigated the total amount of mercury and methylmercury in rice, soil and water from four different rice fields. This study showed the presence of mercury and methylmercury in rice collected from all the barangays of Irawan, Sta. Lourdes, San Jose and Tagburos. The intensive study of Maramba et al. (2006) showed exceedance of total mercury and methylmercury levels in ibis, tabas, lapu-lapu and torsillo ($N > 0.5$ ug/g f.w., $N > 0.3$ ug/g f.w., respectively). Also, *saging* and *kanuping* exceeded permissible levels of methylmercury. Monitoring points at Honda Bay (Palawan Bay) exceeded total mercury standards ($N > 0.002$ ng/mL). The air samples collected from Tagburos, Pagkakaisa, Bagong Silang, Sta. Lourdes and San Jose were found to contain mercury higher than USEPA standard of 0.4 ug/m³.

However, there are limited studies on the levels of mercury in wildlife (flora and fauna) that are found in the vicinity of the former PQMI in Sta. Lourdes. Species of birds such as Rufous Night-heron (*Nycticorax caledonicus*), Black-crowned Night-heron (*Nycticorax nycticorax*), Brahminy Kite (*Haliastur indus*), Intermediate Egret (*Egretta intermedia*), Mallard (*Anas platyrhynchos*), and Zebra Dove (*Geopelia striata*) were seen feeding on the variety of animals in the lake including fish (Garagara et al. 2015). Animals that graze or feed on other animals in the abandoned mercury mining area accumulate mercury in their body and could scatter this to different places. Similarly, plants that have accumulated mercury may have potential effects to the food chain. This has possible effects on the genetics of the flora and fauna that have direct exposure in high mercury levels.

This study comprises the Phase IIA and Phase IIB (Lot 1) of the 5-year research project on mercury levels in humans and wildlife (flora and fauna) in Puerto Princesa City and Province of Palawan.

II. Objectives

Generally, this study aims to provide the latest scientific information on the mercury levels in wildlife (flora and fauna) in Puerto Princesa City. This study will also maximize the utility of mercury analyzer that will be made available by PNRI.

Specifically, this study aims to:

1. Establish a baseline data on levels of mercury in wildlife (flora and fauna) found in Bgy. Sta Lourdes.
2. Map out the spatial locations of areas found with high levels of mercury in wildlife (flora and fauna).

III. Methodology and Scope of Work

This study shall focus on the collection of data from wildlife flora and fauna, and other plants and animals in the impact areas in Bgy. Sta Lourdes, Puerto Princesa City. The Phase IIA shall focus on the 25% of Bgy. Sta Lourdes, from Pit Lake to areas around Honda Bay. The project proponent and Contractor shall determine the detailed delineation of the areas. The Phase IIB shall cover the remaining areas in of Bgy. Sta Lourdes.

The Contractor shall perform the following duties and responsibilities, which are grouped into three (3) major tasks:

1. Stocktaking review
 - 1.1 Compile relevant reports, publication, and documentation about the study area on its bio-physical conditions, demographic profile of residents covered in the study area as previously delineated.
 - 1.2 Review all concerned plans and legal instruments used in relation to the management of the study area.
2. Field data gathering and collection of samples
 - 2.1 Conduct reconnaissance visit in the study area and do initial key informant interview and focus group discussion
 - 2.2 Conduct consultations and arrangement of schedules to the concerned stakeholders and members of the sangguniang barangay
 - 2.3 Conduct mapping as necessary.
 - 2.4 Identify the wildlife (flora and fauna) and collect samples from relevant species for mercury analysis
 - 2.5 Submit the samples to third party laboratory for mercury analysis
3. Analysis of results and report writing
 - 3.1 Prepare discussion and report of the study and present to the PKP partners of the PCSD during one of its regular meeting.
 - 3.2 Submit report to the PCSDS.

IV. Other Conditions

1. Turn over to the PCSDS all the generated data, information, literature, publication collected in the course of the study
2. PCSDS shall have sole ownership of all the outputs of the study on mercury in the abandoned PQMI and shall not be published or furnished to other agencies or used for any other purpose without the written consent of the PCSDS.

V. Reporting and Deliverables

The Contractor shall work closely with the PCSD ECAN Policy Monitoring and Knowledge Management Division for the progress and updates on the project.

The Contractor will submit the following deliverables (ANNEX), within the required timeframe:

1. Inception report, with the recommended outline of the Lot 1, Study of Mercury on Wild Flora & Fauna, and Other Plants & Animals in the Impact Areas (Phase II, Lot 1) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City within 1 month after receipt of Notice to Proceed.
2. First Interim Report of the Lot 1, Study of Mercury on Wild Flora & Fauna, and Other Plants & Animals in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City, 31 May 2020.
3. Second Interim Report of the Lot 1, Study of Mercury on Wild Flora & Fauna, and Other Plants & Animals in the Impact Areas (Phase II, Lot 1) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City, 30 September 2020.
4. Final Report of the Lot 1, Study of Mercury on Wild Flora & Fauna, and Other Plants & Animals in the Impact Areas (Phase II, Lot 1) of the Former Palawan Quicksilver Mines, Inc. (PQMI) in Puerto Princesa City, 24 October 2020.

All reports to be submitted shall be subjected to review and evaluation of the PKP partners of PCSDS and acceptance of PCSDS as the end user.

VI. Duration of Assignment/Research

This contract shall commence and be completed by 30 October 2020.

VII. Cost of Services and Manner of Payment

The estimated lumpsum cost of undertaking the Study of Mercury in Humans and Wildlife [Flora and Fauna] at the Former Palawan Quicksilver Mines Inc, (PQMI) in Puerto Princesa City is Four Hundred Ninety Eight Thousand Pesos (Php 498,000.00), Philippine currency. This is inclusive of the professional fee, taxes, cost of sampling and analyses, and other incidental expenses that will be incurred during the course of the study.

Manner of payment is as follows:

- 15% of the contract cost, upon signing of the contract (Php74,700)
- 45% of the contract cost, upon submission and approval of the Inception Report (Php224,100)
- 25% of the contract cost upon submission of the First Interim Report (Php 124,500)
- 15% of the contract cost upon submission and approval of the Final Report (Php74,700)

VIII. CRITERIA FOR TECHNICAL EVALUATION/SELECTION OF CONSULTANTS

1. EXPERIENCE AND CAPABILITY OF THE FIRM (Maximum of 10 Points)

- A. Record of previous engagement, and quality of performance in similar Project (5 points)..... _____
- B. Record of previous engagement in other project (2 points)... _____
- C. Relationship with previous and current clients, considering repeat engagements as Consultants, disputes arising out of past work or extent of litigations, if any (1 point)..... _____
- D. Overall work commitments, geographical distribution of current/pending Projects and attention to be given by the Consultant (2 points)..... _____

2. PLAN OF APPROACH AND METHODOLOGY (Maximum of 30 Points)

- A. Substance of the proposal as to plan of approach and interpretation of Project problems and solutions (15 points)..... _____
- B. Completeness of the proposal ,compliance with mandatory requirements and no omission as to how any of the work shall be carried out as outlined in the Terms Of Reference (5 points)..... _____
- C. Clarity of methods and approaches to be used; their soundness and Practicability to Philippine /local condition (5 points)..... _____
- D. Total man-months proposed for the services in relation to government estimates (5 points)..... _____

3. QUALITY OF PERSONNEL TO BE ASSIGNED (Maximum Of 60 Points)

A. Project Manager

- General qualifications and competence including education and training, Nature and length of experiences, types of position held, time with the Firm (Range of 10 to 15 points)..... _____
- Suitability to perform the duties of the particular assignments (Range of 10 to 15 points)..... _____

B. Other Key Staff

- General qualifications and competence including education and training (Range of 15 to 20 points)..... _____
- Suitability to perform the duties of the particular assignments (Range of 15 to 20 points)..... _____



MADRONO P. CABRESTANTE
EMED/PDO-V

Terms of Reference

For Lot 2, Contract of Service for the Study of Mercury on Humans in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc (PQMI) in Puerto Princesa City

I. Background

The remnants from former quick silver mine in Bgy. Sta Lourdes, Puerto Princesa City has created worries on the residents of the community as well as of nearby barangays. Previous and recent studies on mercury levels in different environmental samples were conducted in direct impact area, as well as the surrounding barangays. Studies showed elevated levels of mercury in water and sediments in Honda Bay (Kapauan et al. 1982; Gray et al. 2003). Abrahamsson and Ekelund (2014) investigated the total amount of mercury and methylmercury in rice, soil and water from four different rice fields. This study showed the presence of mercury and methylmercury in rice collected from all the barangays of Irawan, Sta. Lourdes, San Jose and Tagburos. The intensive study of Maramba et al. (2006) showed exceedance of total mercury and methylmercury levels in ibis, tabas, lapu-lapu and torsillo ($N > 0.5$ ug/g f.w., $N > 0.3$ ug/g f.w., respectively). Also, *saging* and *kanuping* exceeded permissible levels of methylmercury. Monitoring points at Honda Bay (Palawan Bay) exceeded total mercury standards ($N > 0.002$ ng/mL). The air samples collected from Tagburos, Pagkakaisa, Bagong Silang, Sta. Lourdes and San Jose were found to contain mercury higher than USEPA standard of 0.4 ug/m³.

However, there are limited studies on the levels of mercury in wildlife (flora and fauna) that are found in the vicinity of the former PQMI in Sta. Lourdes. Species of birds such as Rufous Night-heron (*Nycticorax caledonicus*), Black-crowned Night-heron (*Nycticorax nycticorax*), Brahminy Kite (*Haliastur indus*), Intermediate Egret (*Egretta intermedia*), Mallard (*Anas platyrhynchos*), and Zebra Dove (*Geopelia striata*) were seen feeding on the variety of animals in the lake including fish (Garagara et al. 2015). Animals that graze or feed on other animals in the abandoned mercury mining area accumulate mercury in their body and could scatter this to different places. Similarly, plants that have accumulated mercury may have potential effects to the food chain. This has possible effects on the genetics of the flora and fauna that have direct exposure in high mercury levels.

This study comprises the Phase IIC and Phase IID of the 5-year research project on mercury levels in humans and wildlife (flora and fauna) in Puerto Princesa City and Province of Palawan.

II. Objectives

Generally, this study aims to provide the latest scientific information on the mercury levels in the residents in the impact areas of abandoned PQMI in Puerto Princesa City. This study will also maximize the utility of mercury analyzer that will be made available by PNRI.

Specifically, this study aims to:

1. Establish a baseline data on levels of mercury in human hairs of the residents of Bgy. Sta Lourdes, Bgy. Tagburos, and Bgy. San Jose.
2. Map out the spatial locations of areas found with high levels of mercury in wildlife.

III. Methodology and Scope of Work

This study shall focus on the collection of socio-economic data and hair samples of residents of Bgy. Sta Lourdes, Bgy. Tagburos and Bgy. San Jose, Puerto Princesa City. The Phase IIC shall cover the remaining population of Bgy. Sta Lourdes. Phase IID shall focus on the portions of population in secondary impact Bgys: Tagburos, San Jose. The detailed delineation of the areas shall be determined by the project proponent and Contractor.

The Contractor shall perform the following duties and responsibilities, which are grouped into three (3) major tasks:

1. Stocktaking review
 - 1.1 Compile relevant reports, publication, and documentation about the study area on its bio-physical conditions, demographic profile of residents covered in the study area as previously delineated.
 - 1.2 Review all concerned plans and legal instruments used in relation to the management of the study area.
2. Field data gathering and collection of samples
 - 2.1 Conduct reconnaissance visit in the study area and do initial key informant interview and focus group discussion
 - 2.2 Conduct consultations and arrangement of schedules to the concerned stakeholders and members of the *sangguniang barangay*
 - 2.3 Conduct mapping as necessary.
 - 2.4 Conduct interview and collect hair samples of the target respondents/residents of Bgy. Sta Lourdes, Bgy. Tagburos and Bgy San Jose.
 - 2.5 Submit the samples to third party laboratory for mercury analysis
3. Analysis of results and report writing
 - 3.1 Prepare discussion and report of the study and present to the PKP partners of the PCSD during one of its regular meeting.
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4. Final Report of the Lot 2, Study of Mercury on Humans in the Impact Areas (Phase II) of the Former Palawan Quicksilver Mines, Inc (PQMI) in Puerto Princesa City, 24 October 2020.

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- D. Total man-months proposed for the services in relation to government estimates (5 points)..... _____

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