Request for Proposals [READVERTISEMENT]
UNE-GEF PROJECTS
[GEF Project ID: 9494]

Terms of Reference

Augmentation of the gaps identified in the Mercury Inventory Level 2 study project undertaken in South Africa by the Department of Environmental Affairs (DEA).

1. PURPOSE

The purpose of this project is to augment the gaps identified in the Mercury Inventory Level 2 study undertaken by the Department of Environmental Affairs (DEA).

2. INTRODUCTION AND BACKGROUND

2.1 Introduction to the Minamata Convention on Mercury

The Convention was adopted at the Diplomatic Conference for the Minamata Convention on Mercury, held in October 2013, in Japan. The aim of the Convention is to reduce anthropogenic emissions and releases of mercury and mercury compounds. South Africa signed the Minamata Convention in October 2013. Its major highlights include a ban on new mercury mines, the phase-out of existing ones, the phase out and phase down of mercury use in a number of products and processes, control measures on emissions to air and on releases to land and water, and the regulation of the informal sector of artisanal and small-scale gold mining. The Convention also addresses interim storage of mercury and its disposal once it becomes waste, sites contaminated by mercury as well as health issues.

2.2 Mercury Inventory level 2 study undertaken

DEA undertook an inventory of Mercury using Toolkit Level for the Identification and Quantification of Mercury Emissions and Releases, developed by United Nations Environment Programme (UNEP). The project was completed successfully. However, at the launch of the Project in November 2016, mercury stakeholders agreed that there are some additional activities or gaps that should also be attended to. The study elaborated below is as a result of that decision.

3. OBJECTIVES

The objectives of this project is to address the gaps identified on the ongoing inventory thus supplement the scope of the mercury inventory level 2 study, by adding other additional activities which were not originally included, but have since been regarded as are crucial in achieving a comprehensive Level 2 Inventory specifically for SA. The Terms of Reference for the Inventory already undertaken were developed guided by the Minamata Convention for Parties. The supplemented inventory scope is informed by the diverse and more complex mercury industries there are in SA, compared to other countries. The aim of the study is to:

- Address the gaps identified in the recently completed inventory. South African stakeholders during the MIA Launch and Inception meeting held in November 2017 in Durban, SA, identified additional activities and missing activities in the Mercury Level 2 inventory.
- The newly identified activities will augment the mercury Level 2 inventory that has been undertaken in SA, as per the decision taken by South African stakeholders at the MIA Launch held in November 2017 in Durban, SA
- Further, the inventory to address the gaps identified will contribute towards preparing SA for early ratification and effective implementation of the Minamata Convention, including informing the development of a National Action Plan (NAP) based on an inventory that is inclusive of all the sources, releases and emissions of mercury in South Africa.
- Address the stakeholder concerns raised that all sources, releases and emissions are to be identified, known and managed in an environmentally sound manner for mercury to be managed throughout the life cycle.

- Facilitate the integration of mercury into the national environmental agenda in SA, and facilitate the transition to sustainable development designs and processes regarding mercury release reduction from the various relevant sectors and industries in SA.
- It will further enable SA to contribute to the Global measures undertaken by various countries to reduce mercury emissions and releases into the environment as also enshrined in the Minamata Convention on Mercury.
- The identified gaps of the mercury inventory will assist SA to address also the identification of contaminated sites, stocks, obsolete stockpiles, storage facilities, etc.

4. SCOPE AND EXTENT OF WORK

The scope of the project is outlined below. The appointed service provider/s will undertake the following:

Building on the work undertaken in the Level 1 Mercury Inventory for SA, and the recently completed Level 2 inventory, the appointed service provider/s will undertake the following:

4.1 Conduct a national assessment on existing sources of information, studies, and literature review on research that have been undertaken in SA, opportunities and gaps in these studies relevant to the emissions, sources and releases to be identified in line with the specifications below.

4.2 Identify stocks, stockpiles of mercury and mercury compounds.

Article 3 of the Minamata Convention on Mercury provides that each party shall endeavour to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons, as well as sources of mercury supply-generating stocks exceeding 10 metric tons per year, that are located within its territory.

National stocks of mercury or mercury compounds may also accumulate when sources of mercury exceed mercury use. In SA, possible sources include decommissioning of industrial facilities that have previously used mercury; recycling or reclamation of mercury from mercury-containing waste; and the import of mercury which is not currently controlled or legislated.

The following questions may assist in identifying whether the country has a positive or negative net balance of mercury and may identify sources of mercury supply that generate more than 10 metric tons per year.

- Are recycling or recovery activities undertaken within the South African territory which may produce mercury? If so, what quantity of mercury is produced by those activities?
- Are there any facilities that may result in the production of by-product mercury within the South African territory? If so, what quantity of mercury is generated by those facilities?
- Are there facilities manufacturing mercury-added products within the South African territory? If so, what quantity of mercury is used annually at such sites, and for what is it used?
- Are there facilities where manufacturing processes using mercury are carried out within the South African territory? If so, what quantity of mercury is used annually at such sites, and for what is it used?
- If there are stocks of mercury available, provide any related information on the use, storage or disposal of mercury from such stocks and sources.

4.3 Identification of information and data on mercury contaminated sites and wastes

- Identify contaminated sites in the country, and make preliminary estimates, based on existing information, the resources required and the costs that would be incurred to remediate such sites
- Identify available acceptable storage facilities, and relevant disposal facilities the country has, and needs to have for the environmentally sound management of mercury stocks, stockpiles, mercury waste, mercury contaminated waste, and mercury contaminated equipment.
- Identify and develop a strategy for contaminated sites

4.4 Estimate mercury emitted and released during open burning of waste. The fifth session of the Intergovernmental Negotiating Committee on Mercury (INC5) requested UNEP, in connection with its global mercury assessment, to gather sufficient information to support decision making on the issue of open burning of waste and the mercury and mercury compounds released from such activities and to report on its efforts in that regard to the Conference of the Parties at its first meeting. Based on the above request, information that is relevant to the calculation or estimation of mercury emissions and releases from the open burning of waste is required, including quantities of waste generated annually, the proportion of waste subjected to open burning and the average

mercury content of waste. There is currently lack of reliable information on the global levels of emissions and releases of mercury and mercury compounds from the open burning of waste; including data from South Africa. Due to the informal and uncontrolled nature of the open burning of waste, reliable data on this issue is scarce.

4.5 Identify the technology that already exists, and is further needed in the country for managing mercury in an environmentally sound manner throughout the life cycle

- Map relevant Best Available Technology (BAT), relevant Best Environmental Practise (BEP) for the treatment, recovery and disposal of mercury waste; both those already existing in the country, and those that may be needed in the country
- Map the existing technology, facilities, equipment for analysing mercury in various environmental media

The technical experts developing the guidance on BAT and BEP identified several techniques that, although the guidelines may still be at the bench or pilot stage, they have already shown promising effectiveness in managing mercury in an environmentally sound manner throughout the life cycle. The emerging techniques are either dedicated to mercury emission control or designed for multi-pollutant emission control. It is recognized that these techniques may not yet be widely available and that some parties will require capacity-building and training to enable them to keep such techniques under review and to evaluate their suitability.

4.6 Environmental and health related aspects

- Identify cost-effective, environmentally benign alternatives on products and processes, as well as their cost
- Assess the progress made currently in phasing out mercury in the various products of the different sectors,
- During the removal of an amalgam within the dentistry sector it was revealed during the MIA launch meeting, that in South Africa, the current practise is that amalgam is either flushed into drainage system which ends up in the environment (waste water), or is stored in glass jars that are not known how they are disposed of ultimately; where does the amalgam end up after extraction? This question has

become more critical given that it was reported during the MIA launch mercury concentrations in fish are increasing in various fish species.

4.7 Trade related aspects

- The quantities of mercury and mercury-added products imports and exports, including trade in South Africa.
- What is mercury imported for in South Africa, and what procedure is being followed? Detail information is needed especially given the numerous and various government departments having a role to play to manage chemicals? Is consent requested from SA or not? Does the trade rely on a general notification of consent, in accordance with Article 3, including any required certification from importing countries, for all exports of mercury from SA's territory.
- If there have been imports and exports of mercury into the country, provide information on the use of the imported mercury as well as the quantities annually, from 2012-2017
- How can the current importing systems be improved to ensure mercury is traded across borders in an environmentally responsible manner, and in accordance with the obligations of the Minamata Convention?

4.8 Identify mercury containing products that are imported and exported and are not under the controlled and restricted list of SARS.

4.9 Assess the prevalence and concentration of mercury in floating valves and train signals (mercury switches).

4.10 Sample old mine tailings to analyse for the mercury concentration levels in them; mines owned by Department of Mineral Resources (DMR). Permission from the DMR is required in this regard. Historical tailings are reported to have mercury in them, and it is believed that such mines were being re-mined through cyanidation, which is the worst process of re-mining, due to the resulting increase in mercury mobility.

4.11 Investigate and assess in the mining sector, the life cycle (storage, treatment, mercury recovery, and disposal) management of waste water contaminated with mercury from coal washed prior to combustion locally or exportation.

4.12 Identify, assess which types, and what proportion of the batteries currently contain mercury, and in what concentrations.

4.13 Identification of, information and data on mercury contaminated sites and wastes

- Identify contaminated sites in the country, and make preliminary estimates, based on existing information, the resources required and the costs that would be incurred to remediate such sites
- Identify available acceptable storage facilities, and relevant disposal facilities the country has, and needs to have for the environmentally sound management of mercury stocks, stockpiles, mercury waste, mercury contaminated waste, and mercury contaminated equipment.

5. EXPECTED DELIVERABLES / OUTCOMES

Detailed action plan from the successful service provider to clarify the methodology, project goals and time frames.

- Inception report providing the study implementation plan and approaches by task, to be submitted within three (3) weeks after the signing of the Contract by both Parties.
- Draft study report to be submitted for review
- Draft final report implementing review feedback
- Final report

The report should contain the following:

5.1 A national assessment on existing sources of information, studies, and literature review on research that has been undertaken in SA relevant to the emissions, sources and releases to be identified in line with the specifications above (gaps identified during the MIA launch), opportunities and gaps in these studies.

5.2 Identification of stocks, stockpiles of mercury and mercury compounds
Identification of mercury contaminated sites and wastes.

5.3 Estimation of mercury emitted and released during open burning of waste

5.4 Identification of the relevant Best Available Technology (BAT) , relevant Best Environmental Practise (BAP) that exist, and are still needed in the country for analysing, and managing mercury in an environmentally sound manner throughout the life cycle

5.5 Information and data on environmental and health related aspects, as specified above.

5.6 Information and data on trade related aspects, as specified above.

5.7 An identification of mercury in products that are imported into SA and are not under the controlled and restricted list of SARS.

5.8 Assessment of the concentration of mercury in floating valves.

5.9 Information and mercury concentration data on old mine tailings of mines owned by the Department of Mineral Resources (DMR).

5.10 Information and data on the life cycle management of waste water contaminated with mercury from the washed coal.

5.11 Information and data on which, and what proportion of the batteries contain mercury.

5.12 Identification of, information and data on mercury contaminated sites and wastes

5.13 Information and data on mercury contaminated sites and wastes

6. PERIOD / DURATION OF PROJECT / ASSIGNMENT

Project must be completed within 06 months after the signing of the SLA by both parties.

7. SUBMISSION OF PROPOSALS

7.1 Each signed proposal shall contain two parts: technical and financial information, submitted in two (2) separate sealed envelopes marked “Technical” and “Financial”.

Please take note that DEA-Africa Institute is not bound to select any of the firms submitting proposals. DEA-Africa Institute reserve the right not to award any of the bids.

Bidders must score a minimum of 70% to open the financial bids. (The minimum qualifying score that must be obtained for functionality in order for a tender to be considered further)

7.2 **Evaluation criteria**

7.2.1 The Technical part shall contain but not limited to:

- Company profile (indication suitability of the tenderer)
- Approach and methodology
- Implementation schedule
- Curricula vitae (CVs) of all the experts designated for the project.

7.2.2 The financial proposal should contain a breakdown of activities, together with the associated costs, and the total amount for the tender, VAT included.

Evaluation shall follow the points allocated in the table below:

No.	Category	SCORE
	FUNCTIONALITY	100
1.	Proposed methodology indicating how the project is going to be undertaken with time lines/schedule.	20
2.	Company experience and past track records on successful similar assignments	20
3.	Relevant experience in the field of Multilateral Environmental Agreements (MEAs)	20
4.	Relevant qualifications in the field of chemistry or related fields	20
5.	**B-BBEE Status Level Contributor Level**	**Score**
	1	20
	2	18
	3	16
	4	12
	5	8
	6	6
	7	4
	8	2
	Non –compliant contributor	0

8. SPECIAL CONDITIONS OF THE CONTRACT

8.1 The Service Provider/s will submit monthly progress reports to the Project Manager, within three days after the end of each month. Failure to submit the required reports on time will result in penalties.

8.2 The Project Manager shall do the ongoing management of the Service agreement.

8.3 A contractor is not allowed to sub-contract more than 25% of the contract value to another enterprise that does not have equal of higher B-BBEE status level, unless the intended sub-contractor is an EME (Exempted Micro Enterprise) that has the capability and ability to execute the sub-contract

9. PRE-QUALIFICATION CRITERIA FOR PREFERENTIAL PROCUREMENT

9.1 DEA-Africa Institute reserve the right to award the contract to one or more than one service provider or only part thereof

9.2 Suppliers/Service Providers are requested to submit the original and valid B-BBEE Status Level Verification Certificate or certified copies thereof issued by verification agencies accredited by SANAS or registered auditors approved by IRBA or SWORN Affidavit certified by Commissioner of Oath together with their bids.

9.3 A tenderer must submit proof of its B-BBEE status level of contributor. A tenderer failing to submit proof of B-BBEE status level of contribution will be disqualified

9.4 In order to advance transformation Only Exempted Micro Enterprises (EME) and Qualifying Small Enterprise (QSE) shall be considered.

10 TECHNICAL ENQUIRIES

Should you require any further information in this regard, please do not hesitate to contact:

Name: Ms Noluzuko Gwayi (Senior Policy Advisor: International Chemicals and Waste Cooperation)

Office Telephone No. 012 399 9854

E-Mail: ngwayi@environment.gov.za

All interested qualifying consultants must submit their proposals not later than **16.00 hours local time on the 20th of August 2018.**

All proposals must be submitted in a sealed envelope, marked **'SA MIA – Mercury gaps identified under the Level 2 Inventory** to:

Attention: Ms Janet Nemurangoni
Office Administrator
Department of Environmental Affairs
473 Steve Biko Road
Arcadia
Private Bag x447

Pretoria, **0001**