



Request for Proposals (RFP): Design, Supply and Installation of Healthcare Waste Incinerators in Lusaka and Other Healthcare Facilities in Zambia

RFP Issue Date: May 04 2020

Proposal Due Date: 18 May 2020

Submissions due to

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And

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Summary

The Association of Public Health Laboratories, Inc. (APHL or the Association), in collaboration with the Zambia Ministry of Health (MOH) and the United States Centers for Disease Control and Prevention (CDC), anticipates assisting in various waste management projects at laboratories/healthcare facilities across Zambia. The total number of installations will depend on the amount of funding allocated by CDC to these projects and the needs and capacity of the MOH. APHL expects to install and or replace 12 healthcare waste treatment incinerators at multiple locations by the end of September 2020 to assist in the management of waste generated from Viral Load (VL) testing. APHL is looking to identify and select applicants to work with the APHL and CDC to deliver, install and commission these technologies to better manage the waste emanating from these facilities.

Background

APHL is a non-profit organization that works to safeguard the public's health by strengthening public health laboratories (PHLs) in the United States and globally. APHL is organized under the laws of the United States of America's District of Columbia with its headquarters office at 8515 Georgia Avenue, Suite 700, Silver Spring MD 20910. The Association's members include state and local laboratories, state environmental and agricultural laboratories and other government laboratories that conduct testing of public health significance. APHL is recognized as tax exempt in the United States under Section 501(c)(3) of the U.S. Internal Revenue Code and its work on behalf of PHLs spans more than 60 years.

In collaboration with its members, APHL advances laboratory systems and practices and promotes policies that support healthy communities globally. The Association serves as a liaison between the PHLs and federal and international agencies and it ensures that the network of PHLs has current and consistent scientific information in order to be ready for outbreaks and other public health emergencies.

The APHL Global Health Program (GHP) currently implements laboratory improvement projects in several countries throughout Africa and in parts of Asia and Eastern Europe. APHL has supported the President's Emergency Plan for AIDS Relief (PEPFAR) program in Zambia through a Cooperative Agreement Number NU2GGH001097 (the Cooperative Agreement) with the CDC. This support has allowed APHL to provide technical assistance to strengthen laboratory services in the area of Quality Management Systems (QMS), Laboratory Information Systems (LIS), and energy infrastructure improvements.

Anticipated RFP Schedule

Proposals are due to the individual(s) specified in the Final RFP Response section of this RFP by 5:00 pm Central Africa Time (CAT) on 18 May 2020. APHL anticipates the following schedule for the entire competitive bidding process:

04 May 2020	APHL issues RFP
18 May 2020	Deadline to submit proposals

26 May 2020	Evaluation committee completes review
28 May 2020	APHL announces selection of vendor(s)
1 June 2020	Anticipated start date of work by selected vendor(s)
15 September 2020	Equipment delivered to Zambia

Final RFP Response

APHL must receive a complete proposal by no later than 5:00 PM (CAT) on 18 May 2020. Applicants may send proposals by the following methods:

Via email to Clement.Phiri@zmb.aphl.org and Edward Krisiunas (ekrisiunas@gmail.com) or via certified, registered or express mail provided the postal service or trackable mail delivery services provided by DHL, FedEx, UPS and the like addressed to:

c/o Clement Phiri, Laboratory Technical Advisor
 APHL Zambia,
 52 Paseli Road, Northmend, Lusaka, Zambia
 Tel: +260 211 296180

APHL will send an email acknowledging the receipt of your application. If you do not receive an acknowledgement within 48 hours, please email the points of contact above to confirm receipt.

Regardless of the delivery method, APHL must receive all responses at their Zambia offices by 5:00 PM Central African Time. It is applicant's responsibility to ensure that the proposal is received at APHL by this deadline.

APHL may terminate or modify the RFP process at any time during the response period. All changes to the RFP will be posted to the APHL's procurement website, www.aphl.org/rfp.

Evaluation of Proposals

Initial Review

APHL staff members or consultants under contract with APHL will conduct an initial review of all proposals for completeness. APHL will not consider any incomplete applications, and these applications will not receive a formal evaluation.

Evaluation Team

An evaluation team will be assembled to evaluate competitive proposals and then assess their relative qualities based on an Evaluation Criteria that will look at past experience, location of company, ability to provide local services, and but not limited to quality of submission.

Conflicts of Interest

APHL will ask potential reviewers to disclose any real or perceived conflict of interest prior to the start of the evaluation process or to affirm that they have no conflict of interest that would preclude an unbiased and objective review of the proposals received. APHL will not select a reviewer with a perceived conflict of interest. If a reviewer identifies a conflict of interest after the evaluation team has been assembled, APHL will exclude that reviewer from further participation in the review process and will eliminate the reviewer's completed reviews from the evaluation process. Reviewers will complete a Conflict of Interest Form administered before the evaluation process.

Supplemental Proposal Information

The evaluation team may request follow up interviews with applicants and/or supplemental information on an applicant's proposal. Once the evaluation team has additional material from the interviews and supplemental information, the team will evaluate whether this material alters the relative ranking of any individual applicant. If the consensus of the evaluation team is that the new material merits adjusting the applicant rankings, the team will do so. In this event, APHL will use the revised ranking to identify the Eligible Supplier(s).

APHL staff will notify each of the Eligible Supplier(s) by no later than the date noted in the Anticipated RFP Schedule above and will post the names of the successful applicants to its procurement website, www.aphl.org/rfp within one business day after it completes the notifications.

Unsuccessful applicants will receive notification of these results by e-mail or by regular postal service mail within 30 days of the date the names of the Eligible Suppliers are posted.

All applicants will be entitled to utilize APHL's Appeals Process to formulate a protest regarding alleged irregularities or improprieties during the procurement process. Specific details of the policy are listed on the procurement website.

The eligible applicants must be able to contract directly with APHL or have an existing relationship with a third party organization that can contract directly with APHL on behalf of the applicant.

Disclaimer and Other General Matters

This RFP is neither an agreement nor an offer to enter into an agreement with any applicant.

APHL will ensure that the Eligible Suppliers are neither suspended nor debarred from receiving United States federal funds and that the Eligible Suppliers meet any other funding eligibility requirement imposed by the Funding Agency. APHL's determination of whether an Eligible Supplier is eligible to receive funding will be definitive and may not be appealed. If APHL determines that one or more Eligible Suppliers are ineligible to receive funding, APHL will nullify the contract or will cease negotiation of contract terms.

Each applicant will bear its own costs associated with or relating to the preparation and submission of its application and as otherwise noted throughout this RFP. These costs and expenses will remain with the applicant, and APHL will not be liable for these or for any other costs or other expenses incurred by the applicant in preparation or submission of its application, regardless of the conduct or outcome of the response period or the selection process.

TECHNICAL SPECIFICATIONS for APHL Zambia

Country Background - Technical and Environmental Information for Potential Suppliers

The following information is provided so all suppliers can ensure the equipment they are offering to supply conforms to prevailing national climatic conditions. These include the following:

Electricity Supply

Mains Supply:

All Hospitals have single supplied as Phase 220 Volts 50 Hz

Three Phase is mostly supplied as 380Volts, 50 Hz

Problems exist with mains fluctuations, approximately +/-10% in both the voltage and frequency supplied; some problems with mains cut-off (black-out); There are spikes, not necessarily on the main supply but when large plant items cut in such as lift motors. Supplier should check/modify their power supply units if necessary; or state if voltage stabilizers is required alongside their products.

Environment. Height above sea levels average 4700. Suppliers should check whether this will affect motors, pressure vessels, etc.

Temperature: Average temperature in winter inside Hospitals 16 Degrees Celsius.
Average Temperature in summer inside Hospitals 32 Degrees Celsius

Humidity: As a land locked country, and high above sea level, naturally humidity is not a serious problem.

Dust: All Hospitals have a problem of dust getting into equipment and clogging up filters equipment may need additional filter protection.

Vermin: All Hospitals have a problem of rats chewing wiring, equipment may need metal vermin guards.

Language: All manuals To be in English
All labels and markings on machines. To be in English

Equipment for Healthcare Waste Treatment

The awardee will supply a range of incinerators for healthcare waste with capacities of 50, 70, and 500 kg/hour. These incinerators will be used for the treatment of the wide range of health care waste, including, but not limited to, infectious waste from wards and the clinical labs, sharps, pathological/placentas, and small amounts of liquid waste.

GENERAL REQUIREMENTS FOR THE SUPPLY

Quantity: **Twelve (12) pieces of incinerators for healthcare waste.** Each equipment must at least consist, of the following:

- (1) Requisite burning capacity incinerator for healthcare waste (See attached list of locations/capacities)
- (2) One wear and spare parts package
- (3) Delivery and commissioning
- (4) Staff training
- (5) At least two year warranty minimum

The following requirements are considered an integral part of the technical specifications:

DOCUMENTS TO BE PROVIDED BY THE BIDDER

- A company profile that provides (i) the physical and postal address for the applicant's principal office in Zambia or, for international firms, its headquarters office and (ii) the name, title, business and/or mobile phone numbers and an email address for one or more contact persons.

Note: For international companies, please show a company profile that provides the physical and postal address for the applicant's local partner company that will provide in-country services, aftersales services and maintenance.

- A description of the company that includes (i) a discussion of key staff members qualifications and experience, (ii) proof of the applicant's capacity to implement projects of comparable complexity and (iii) any evidence of experience in project of similar size.
- Copies of the applicant's certificate of company registration or incorporation and any certificate of amendment to that registration/incorporation, together with evidence that the company is in good standing.
- Filled in Tables of the Technical Specification (Bidder Statements – see below)
- Evidence of factory testing of performance and emission values by the producer or independent authorised institution.
- Implementation plan and training concept
- Maintenance Plan
- Detailed List related to Wear and spare part Package for operation (items which will be included in the contract). The list should be detailed enough to allow the client to carry out a cost estimation
- Other information such as process description, brochures, etc. should be only added if the information will be useful for the technical evaluation of the treatment process.
- Dimensions and weight of each unit

The Bidder is requested to fill in the following tables:

No	Specification	Specifications Offered (Must be answered)	Notes, remarks, ref to documentation	Evaluation Committee's notes
1.	Type of incinerator : diesel dual chamber, fully automatic process control, top or front loading,) / manual feeding <i>Note on fuel: The primary fuel source is diesel.</i>	Complies	Bidder statement	
1a.	Unit dimensions Unit Weight Minimum footprint for equipment Foundation requirements for equipment			
2.	Burning capacity: A range of units is required: 50 (# = 3). 70 (#=8) and 500(#-1) Kg/hr. The three (3) 50 Kg/hour units can be proposed as containerized units with details of ground essential connection facilities such as plinth, water and electricity points			
3.	Operating temperature: Primary Chamber: 850 – 1200 °C			

	Secondary Chamber: 1200-1300 °C			
4.	Refractory temperature resistance Primary Chamber: 1300 °C - 1600 °C Secondary Chamber: 1400 °C - 1600 °C			
5.	Control Panel: <ul style="list-style-type: none"> • PLC based • Digital interface • Digital temperature controller • Audio-Visual alarm system • Weather resistance IP665 or above rated. • User friendly and simple to operate 			
6.	Combustion gas residency time in secondary chamber: at least 2:0 sec			
7.	Loading mode: Manual loading, manual door			
8.	Loading Capacity: min 10 kg per batch size			
9.	Feeding of waste: Manual feeding			

10	Ash Residue: <5%			
11	De-Ashing mode: Manual			
12.	Air pollution control system: Provide data that supports what air emission standards are met by your technology.			
13.	Minimum stack height: 10 meters from the ground with sampling possibilities (Note that stack height can be adjusted to be in conformance with good combustion process per the vendors recommendations as well as local height restrictions)			
14.	Accessories: All standard accessories for incinerator			
15.	Fuel Storage: Provide fuel system tests in accordance with FACTORY-FABRICATED FUEL STORAGE TANKS. The tank will be installed and connected by the supplier of the incinerator.			
16	Measuring Instruments: Measuring equipment shall be installed and techniques used in order to monitor the parameters, conditions, and mass concentration relevant to the incinerator process.			

17	Operating Environment: The incinerators are capable to operate at the altitude of each location at or above sea level. (according to the site conditions)			
18.	Power Requirement: Electricity supply: 220 volts / 50 HZ / single phase or 380 volts / 50 HZ / three phase or based upon size of unit as per manufacture's specifications			
19.	<p>The incinerator fulfils the following Standards and Safety Requirements:</p> <ul style="list-style-type: none"> ▪ CE Certified or other equivalent product certification/designation/approval that indicates the system has been properly constructed/assembled for health and safety within the country of manufacture ▪ Electrical safety conforms to standards for electrical safety. 			
20.	Installation Testing and Commissioning: Conducted by certified or qualified personnel.			
21.	Lead time to delivery: Provide the best lead time period from award to commissioning of the units at all the 12 sites			
22.	Payment expectation: Describe the payment plan expectation to execute the project (note APHL may still limit the obligation on the payment to rules and regulations of the USAID/USG funds)			
23.	<p>Supplier shall provide the following documentation</p> <ul style="list-style-type: none"> ▪ User (Operating) manual in English ▪ Service (Technical / Maintenance) manual in English ▪ Certificate of calibration and inspection from factory. 			

24.	Fast moving spare parts: Supplier shall provide fast moving spare parts list with quantities as described in the price schedule			
25.	Training: Supplier shall provide training on operation, management and maintenance of incinerators for the local facility staff.			
26.	Warranty: Comprehensive warranty for minimum 2 year.			
27	Maintenance Service during Warranty Period: During warranty period supplier must ensure, corrective/breakdown maintenance whenever required.			
28	Supplier should be a local organization or have a local agent (if the supplier is external) and when external supplier is awarded, shall work on having a local agent for aftersales service and distribution of spare parts. Note on external agent: It is preferred to have a local agent based in Zambia to cover the aftersale service.			
29	Supplier provides references for 3 similar installations in the region by them or their prime partner in this bid			

Lists of fast-moving spare parts with quantities to be delivered with incinerators. (40 kg/hr capacity), as per set out in the price schedule

Note: Appendix A provides the location where the incinerators shall be delivered (distance from Lusaka is provided) and the required throughput capacities.

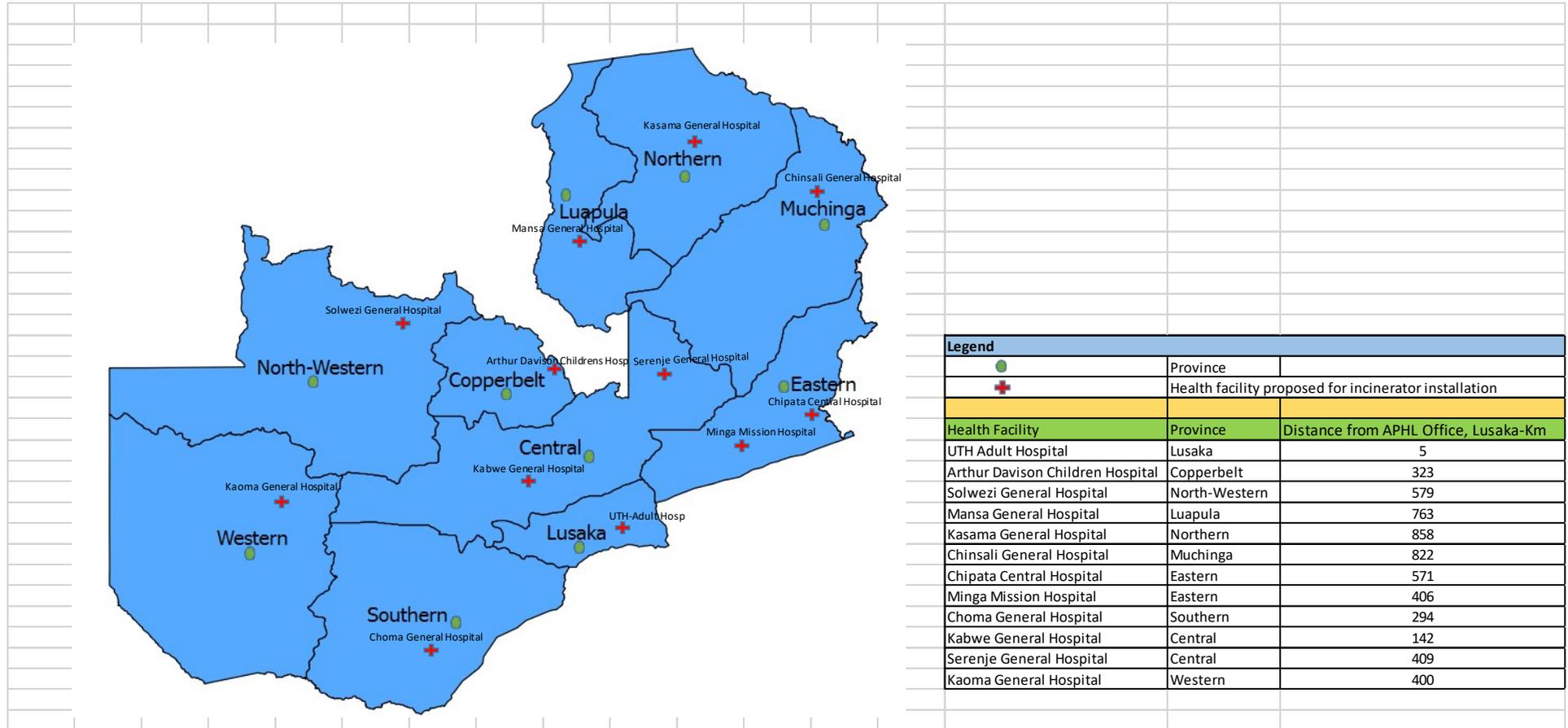
ACCOMPANYING DOCUMENTS

The following accompanying documents must be supplied with each of the delivered treatment systems:

- (A) Two (2) full operation instructions (including process description; loading and maintenance procedures) in English.
- (B) Three (3) short form of operation and loading procedures.
- (C) Utilities connections and connection plan, technical data sheet, approved certificates for the safety elements (probes, safety beakers etc.) (English).
- (D) One set of safety regulations (English).
- (E) Set of necessary safety signs.

All documents must be provided additionally in digital form in English.

Appendix A – Location of Facilities / Proposed Waste Processing Needs (kg/hr)



Procurement Needs Summary -Proposed Waste Processing Needs (kg/hr)								
No	Category	Description	Specifications	Facility	#	Infrastructure availability	Proposed infrastructure plan	Existing Incinerator
1	Incinerator	25Kg/hr incinerator	50/kg	Minga	1	No	Containarised Incinerator	Brick Furnace
2		50Kg/hr incinerator	50Kg/hr	Serenje	1	No	Containarised Incinerator	Brick Furnace
3		50Kg/hr incinerator	50Kg/hr	Kaoma	1	No	Containarised Incinerator	No
4		70Kg/hr incinerator	70Kg/hr	Chinsali	1	Yes	exisiting structure may require expansion	Macroburn 23
5		70Kg/hr incinerator	70Kg/hr	Chipata	1	Yes	Housing require expansion and roof rehabilitation	Macroburn 23B
6		70Kg/hr incinerator	70Kg/hr	ADCH	1	Yes	Require roof rehabilitation	Macroburn 50
7		70Kg/hr incinerator	70Kg/hr	Kasama	1	Yes	Housing require expansion and roof rehabilitation	Macroburn 23
8		70Kg/hr incinerator	70Kg/hr	Mansa	1	Yes	exisiting structure may require expansion	Macroburn 50
9		70Kg/hr incinerator	70Kg/hr	Solwezi	1	Yes	exisiting structure may require expansion and roof rehabilitation	Macroburn 100
10		70Kg/hr incinerator	70Kg/hr	Choma	1	No	Containarised Incinerator	Brick Furnace
11		70Kg/hr incinerator	70Kg/hr	kabwe	1	No	Containarised Incinerator	Brick Furnace
12		500Kg/hr incinerator	500Kg/hr	UTH Adult	1	Yes	Housing requires roof rehabilitation	Macroburn 500
		Total			12			

Appendix B – Current Construction / Comments for need of Civil Works

Photographs of sites that will receive incinerators. This information is provided to vendors so they may consider logistics for installation.

1-UTH Main: A decision will need to be made on which of the two housings in proximity will be used for the installation of the 500kg unit to be procured. The other housing has a leaking roof and no proper sealing exists between the roof and the chimney.



2-Arthur DH: The photo at ADH shows a non-functional Macroburn Unit. This project plans to replace the non-functional unit with a 70kg Unit. The housing, especially the roof, will need to be worked on before installation of new unit.



3. Solwezi



4. Manza



5. Kasama



6.-Chinsali DH: The photo of the incinerator at Chinsali District Hospital does not give a good view of the housing but since we will be replacing this with a new 70kg unit, it will be wise to visit to the housing unit before we install the new unit.



7. Chipata – No photos

8. Minga – No photos

9. Choma –



At Choma General Hospital there is only a concrete slab and a partially completed wall plus an incomplete roof. The housing and roof must be completed before installation of new 70 kg incinerator.

10. Kabwe – No photos

There is an incomplete incinerator housing at Kabwe Central Hospital which must be completed before supply and installation of a new 70kg Incinerator. The brick furnace must also be removed before installation of the new unit.

11. Serenje



12. Kaoma – No photos – may require a new structure for an incinerator