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The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.

REQUEST FOR TENDERS

File: AP 6/5/6/3
Date: 22 January 2016
To: Prospective Contractors
Contact: Stewart Williams- Stewartw@sprep.org
Subject: **Request for Tenders:**

Asbestos Removal Works in Tonga, including replacement, transport and disposal in 8 Public Locations in Tongatapu and Vava'u

1. Background

- 1.1 The Secretariat of the Pacific Regional Environment Programme (SPREP) is an intergovernmental organisation charged with promoting cooperation among Pacific Island countries and territories to protect and improve their environment and ensure sustainable development. For more information see www.sprep.org
- 1.2 SPREP received funding from the European Union under the 10th European Union Development Fund (EDF10) programme to improve the management of asbestos materials and wastes in priority Pacific Island countries. For more information see [PacWaste Project](#)
- 1.3 The PacWaste project has now completed asbestos baseline studies in 13 Pacific island countries across 27 separate islands and the final reports have been completed and can be accessed at <https://www.sprep.org/reports/pacwaste-asbestos-survey-reports>

2. Specifications: Statement of Requirement

- 2.1 SPREP is calling for tenders from qualified and experienced International Contractors who are appropriately qualified and experienced to conduct asbestos removal works in Tonga accordance with international best practice.
- 2.2 The asbestos removal works are to be conducted in 8 locations in Tonga on the Islands of Tongatapu and Vava'u and will include removal and replacement of asbestos materials (friable and non-friable), transport, storage, disposal and training.
- 2.3 It is envisaged that the successful offer would be based on a model of local equipment and human resources being utilised (where feasible), training in safe asbestos removal being provided, and asbestos interventions being supervised and led by internationally qualified personnel for all required works associated with, removing, containing and disposing of the asbestos in accordance with international best practice.
- 2.4 Full details on the locations to be targeted, best practice requirements, procedures, equipment and estimated costings are contained within the PacWaste projects *Survey of the Regional Distribution and Status of Asbestos-Contaminated Construction Material and Best Practice Options for its Management in Pacific Island Countries-*

Report for the Kingdom of Tonga (Tonga Asbestos Country Report) which accompanies this request for tender.

- 2.5 The requirements for the contractor as required by SPREP are set out in the **Terms of Reference** (Annex A), **Technical Specifications** (Annex B) as well as in the 'Tonga Asbestos Country Report' as identified in point 2.4. Any national or local requirements are to be identified by the successful tender company

3. Conditions: Information for Applicants

- 3.1 To be considered for this tender, interested applicants (Contractors) must:
- (a) Submit details of current and/or previous international experience in conducting asbestos removal projects involving both friable asbestos (lagging materials) and ACM such as roofing, cladding, soffits and flooring and to replace them with non-asbestos materials if required;
 - (b) Demonstrate an ability to train, equip and lead local teams to ensure that costs for conducting works are minimised and that a pool of trained individuals is developed within the country and to work with Tongan government counterparts to ensure the project runs on schedule and in accordance with local requirements;
 - (b) Provide relevant references as part of their tender application; and
 - (c) The successful applicant (Contractor) will be required to provide a bank guarantee equivalent to any advance payment to be made under the contract with SPREP for the duration of the contract;
 - (d) A standard penalty clause of one percent (1%) of the total contract value will be deducted from the final contract amount for every 2 week (or part thereof) overrun from the nominated delivery date in completion of all the contract deliverables.

4. Submission Guidelines

- 4.1 Tender documentation should demonstrate that the interested Contractor satisfies the conditions stated above and is capable of meeting the Technical Specifications and provide supporting examples to address the evaluation criteria.
- 4.2 Tender documentation should outline the interested applicant's complete proposal and include:
- (a) Previous examples of relevant experience applicable to the tender;
 - (b) A Technical Proposal, which contains the detailed methodology, work plan and time schedule to achieve the tasks outlined in the Terms of Reference (Annex A); and
 - (c) A Fees Proposal, to be priced on a lump sum basis with (itemised) prices for:
 - (i) **Purchase** fees for the specified equipment required to successfully conduct the works in accordance with international best practice;
 - (ii) **Delivery** fees including all transport and importation costs to the Pacific island locations identified in this tender for all specialised equipment that is not otherwise available within Tonga;;
 - (iii) **Site Preparation** fees including facilities that will ensure that worker leave the site free of asbestos, that wash down facilities are provided as

well as barriers, containment areas, site storage and appropriate signage and security;

- (iv) **Travel** costs for proposed personnel that includes both international and local components;
- (v) **Training and equipment** costs associated with equipping and preparing a local team to conduct the works required; and
- (vi) **Transport and disposal** fees to ensure that all asbestos is contained and transported in accordance with best practice and that movement off site of all asbestos follows a formal chain of custody process and ensures the final burial of asbestos at a designated landfill under professional supervision.

4.4 Tender submissions must be in United States Dollars (USD).

4.5 The Proposal must remain valid for 90 days from date of submission.

5. Tender Clarification

5.1 Any clarification questions from applicants must be submitted by email to stewartw@sprep.org before 26th February 2016. A summary of all questions received with an associated response will be posted on the SPREP website www.sprep.org/tender by 2nd March 2016.

6. Evaluation Criteria

6.1 SPREP will select a preferred Consultant(s) on the basis of SPREP's evaluation of the extent to which their documentation demonstrates that they offer the best value for money, and that they satisfy the following criteria:

- (a) Previous experience in Pacific Island Countries and Territories;
- (b) Have a pre-existing, or can quickly establish a working relationship with Pacific island government departments and a knowledge of government procedures;
- (c) International qualifications equivalent to that required in Australia or New Zealand to lawfully conduct asbestos removal works for both friable and non-friable asbestos and knowledge of best practice asbestos management and disposal protocols and techniques;
- (d) Demonstrated 10 years of experience in conducting friable and non-friable (ACM) asbestos removal and replacement works in accordance with international best practices;
- (e) Demonstrated ability to conduct asbestos removal works in Pacific Islands Countries and Territories and/or equivalent remote locations;
- (f) Demonstrated experience in delivery of local training and assessment (experience in training people from diverse language and cultural backgrounds and with low literacy skills is desirable);
- (g) Details on the schedule and timeframe required to provide the deliverables;
- (h) Fluency in English, both written and verbal.

7.2 Assessment of proposals will be based on the evaluation of the Technical Proposal (70% weighting) and Financial Proposal (30% weighting).

7.3 The Financial Evaluation will award maximum points to the lowest priced bid. Subsequent bids will be awarded points calculated as a percentage of the lowest price.

8. Deadline

8.1 The due date for submission of the Tender is: 9:00am on 4th March 2016 (local time UTC/GMT +13:00).

8.2 Late submissions will be returned unopened to the sender.

8.3 Please submit tenders clearly marked to:

Tender: Asbestos Removal Works in Tonga, including replacement, transport and disposal in 8 Public Locations in Tongatapu and Vava'u

using one of the following methods:

By mail: Secretariat of the Pacific Regional Environment Programme (SPREP)
PacWaste Healthcare Waste Tender
PO Box 240
Apia, SAMOA

By e-mail: tenders@sprep.org

In person: Submit by hand in the Tenders box at SPREP reception, Vailima, Samoa.

8.4 SPREP reserves the right to reject any or all tenders and the lowest or any tender will not necessarily be accepted.

ANNEX A - TERMS OF REFERENCE

The Request for Tenders/Quotations:

Asbestos Removal Works in Tonga, including replacement, transport and disposal in 8 Public Locations in Tongatapu and Vava'u

Table 1: Tonga Asbestos Intervention Sites and Details

Site Name	ACM	Risk Score	Recommended Remedial Actions	Estimated ACM Area (m ²) and/or Volume (m ³)
Tonga Post Ltd	Fibre cement roof	27	Remove and replace ACM	1,400 m ²
	Soffits	25		
Neiafu former market - Tonga Football Association, Vavau'u	Fibre cement (roof)	24	Remove and replace ACM Roof	300 m ²
MOI Wof Centre	Fibre cement cladding	24	Remove and replace ACM Roof and facades.	900 m ²
Fua'amotu Domestic Airport – Residential	Fibre cement (roof)	22	Remove and replace ACM	450 m ²
Prince Ngu Hospital, Neiafu, Vava'u	Fibre cement (loose rear car park)	21	Pick up loose ACM, assess soil	50 m ²
	Fibre cement roof	21	Remove and replace ACM	3,600 m ²
St Andrews School	Fibreboard classroom 15	21	Remove and replace ACM	160 m ²
Tonga Water	Fibre cement (roof and facades)	20	Remove and replace ACM	100 – 120 m ² (10m ³)
Viola Hospital, Haveluloto, Tongatapu	Walkway fibre cement roof	17	Remove and replace ACM	20 m ²

*extract from table 13 page 46 of the PacWaste projects *Survey of the Regional Distribution and Status of Asbestos-Contaminated Construction Material and Best Practice Options for its Management in Pacific Island Countries-Report for the Kingdom of Tonga*.

Tasks

The Contractor will:

1. Be responsible for engagement of the necessary Tongaan authorities and stakeholders and ensure all appropriate permits and other requirements are met to enable works to be lawfully undertaken in each of the locations identified in Table 1;
2. Remove and dispose of the friable and non-friable asbestos materials from the intervention sites identified in Table 1 in accordance with the best practice Technical Specifications presented within this tender document and in accordance with accompanying reports and national/local requirements;
3. Install appropriate weather resistant materials, as necessary, such as roofing, flooring and external cladding in locations as necessary where asbestos materials have been removed in accordance with the requirements of this tender;
4. Design and deliver suitable in-country training in country training to enable works to be undertaken effectively, safely and in accordance with the tender and national requirements;
5. Provide all necessary equipment, monitoring, supervision and testing to ensure works are conducted safely, lawfully and in accordance with international best practice and National/local requirements; and
6. Submit an Implementation Plan (Annex B) for approval by SPREP that will contain at a minimum:
 - a. a general description of the methods which the Contractor proposes to adopt for executing the contract;
 - b. a proposed time schedule and sequence of events that the Contractor will use to meet the contract including preparation stages, training, site works, disposal and site closure;
 - c. the approach to be adopted for operator training appropriate for the Pacific island context;
 - d. contingency planning for travel in the Pacific, allowing for weather events and natural disasters; and
 - e. such further details and information as SPREP may reasonably require.

Deliverables

1. Asbestos safely and legally removed from the identified Intervention sites in table 1 and replaced (where needed) with non-asbestos replacement materials where required (Roofing, flooring, cladding);
2. Trained and competent end users and documented evidence of competency achieved with training tools made available for future use; and
3. Final Report detailing:
 - a. Confirmation that works have been completed at all locations;
 - b. Verification that asbestos wastes have been lawfully disposed of in accordance with international best practice and national requirements;
 - c. Confirmation of site closure and legal handover process to the relevant authorities;
 - d. A record showing that all works were conducted in accordance with international best practice;
 - e. Information on practices, equipment and processes that were used; and

f. Training – process, outcomes.

4. Implementation Plan and Timeframe

- a. An Implementation Plan must be submitted to SPREP in writing within 15 working days of signing of the contract.
- b. The contractors are to nominate the maximum time period required to complete the tasks detailed above. Failure to deliver within that time period may result in enforcement of payment penalties.

5. Report timeframe

The Final Report will be submitted to SPREP no later than four (4) weeks after the completion of all tasks.

1. Asbestos Removal Plan

For each intervention site a detailed “**Asbestos Removal Plan**” must be prepared that addresses the following matters:

- a. Identification:** Details of the asbestos-contaminated materials to be removed – for example, location/s, whether it is friable or non-friable, condition and quantity to be removed – include references to analyses.
- b. Preparation:**
 - i) Consultation with regulators, owners and potentially affected neighbours;
 - ii) Assigned responsibilities for the removal;
 - iii) Programme of commencement and completion dates;
 - iv) Consideration of other non-asbestos related safety issues such as safe working at heights;
 - v) Asbestos removal boundaries, including the type and extent of isolation required and the location of any signs and barriers;
 - vi) Control of electrical and lighting installations;
 - vii) Personal protective equipment (PPE) to be used, including respiratory protective equipment (RPE);
 - viii) Details of air monitoring programme;
 - ix) Waste storage and disposal programme.
- c. Removal:**
 - i) Methods for removing the asbestos-contaminated materials (wet or dry methods);
 - ii) Asbestos removal equipment (spray equipment, asbestos vacuum cleaners, cutting tools, etc);
 - iii) Details of required enclosures, including details on their size, shape, structure, etc, smoke-testing enclosures and the location of negative pressure exhaust units if needed;
 - iv) Details of temporary buildings required for asbestos removal (eg decontamination units), including details on water, lighting and power requirements, negative air pressure exhaust units and their locations;
 - v) Other control measures to be used to contain asbestos within the asbestos work area. This includes dust suppression measures for asbestos-contaminated soil.
- d. Decontamination:** Detailed procedures for the workplace decontamination, the decontamination of tools and equipment, personal decontamination of non-disposable PPE and RPE, decontamination of soil removal equipment (excavator, bobcat etc).
- e. Waste Disposal:**
 - i) Methods for disposing of asbestos waste, including details on the disposal of:
 - (1) Disposable protective clothing and equipment; and
 - (2) Structures used to enclose the removal area.

2. Asbestos Removal Specifications

- a. Removal of friable asbestos will need to be carried out with specialist asbestos contractors who will not normally be available in Pacific countries;
- b. Removal of non-friable asbestos roofs and cladding will need to be done according to appropriate protocols and will again need specialist supervision and training;
- c. The following steps would be typical for a roof asbestos removal project:
 - i) Prepare asbestos removal plan, set up asbestos boundaries and signage, prepare PPE and decontamination area;
 - ii) Set up scaffolding to both sides of building to assist in removal of roof sheeting & to remove asbestos guttering from building. Set up anchor point for fall arrest systems;
 - iii) Spray the entire roof with a water based PVA solution;
 - iv) Carefully remove the roof sheeting by unscrewing, (not breaking) the roof sheets. All roof sheets to be stacked onto plastic sheeting sitting on bearers for ease of removal. Sheetting to be fully wrapped in plastic & taped shut. Roof sheeting and all materials, (ridging, barge flashing, gutters etc) to be loaded into suitable containers for disposal (plastic lined bins or fabric bags such as "Asbags") for correct removal & disposal;
 - v) Vacuum clean the existing ceiling & roof space, (rafters, purlins, ceiling joists) with a suitable vacuum cleaner fitted with a HEPA filter;
 - vi) Supply & fit heavy duty tarpaulins to keep the roof waterproof before installation of new roofing.

3. Asbestos Roof Replacement Specifications

- a. The new roof sheeting, insulation, guttering and downpipes should be durable (long life and resistant to corrosion from marine environments. Suitable insulation will also need to be installed to keep the building cool;
- b. One option where a large amount of roofing is to be installed is to use a roof roll forming machine and form the roofs locally. Roofing materials could then be cut to suit and purchase of the sheet metal rolls would be cheaper than the finished roofing sheets;
- c. Of course the capital cost of the roll forming machine would need to be included in the cost calculations. It may also be appropriate to use aluminium rolls which would be corrosion resistant in marine environments;
- d. Alternatively suitable roofing materials can just be imported such as Colourbond Ultra Grade, which is suitable for corrosive marine environments;
- e. The following steps would be typical for a roof replacement project:
 - i) Supply & fit suitable roof netting over existing purlins & fix in place ready to support suitable insulation such as 50mm thick, foil coated, fiberglass insulation;
 - ii) Supply & lay a top layer of insulation foil over the fibreglass insulation blanket as a dust and moisture barrier;
 - iii) Supply & screw fix suitable roofing material such as Colourbond Ultra Grade corrugated roofing, including for ridging & barge flashings;
 - iv) Supply & fix suitable guttering such as Colourbond box guttering to both sides of the roof & include for one downpipe each side, feeding to a tank.

4. Asbestos Disposal to Landfill

- a. In order for local burial of ACM and asbestos-contaminated wastes to occur in a local landfill that takes general refuse, there must be a suitable landfill available as follows:
 - i) The landfill must be manned and secure so that no looting of asbestos materials can occur;

- ii) The landfill must have proper procedures for receiving and covering asbestos waste. A suitable hole must be excavated, the asbestos waste placed in the hole, and the asbestos waste covered with at least one metre of cover material. The asbestos waste should be buried immediately on receipt at the landfill;
- iii) Machinery must be available to enable the excavation and covering to occur;
- iv) The location of the asbestos should be logged or an asbestos burial area designated;
- v) Records of dates and quantities should be kept;
- vi) The alternative to burial in a local landfill is to construct a special monofill for asbestos waste. This landfill could be lined and sealed once it is full. This process is expensive, however, and would only be justified where there is a large amount of asbestos for disposal.