REQUEST FOR TENDERS

RFT: GEFIS_2024/004
File: AP_6/5/9
Date: 25 September, 2024
To: Interested contractors
From: Joshua Sam, Hazardous Waste Management Adviser

Subject: **Repackaging, loading, stowage and international disposal of Dichlorodiphenyltrichloroethane (DDT) and Polychlorinated biphenyls (PCB) waste from Papua New Guinea**

1. Background

1.1. The Secretariat of the Pacific Regional Environment Programme (SPREP) is an intergovernmental organisation charged with promoting cooperation among Pacific islands countries and territories to protect and improve their environment and ensure sustainable development.

1.2. SPREP approaches the environmental challenges faced by the Pacific guided by four simple Values. These values guide all aspects of our work:

- We value the Environment
- We value our People
- We value high quality and targeted Service Delivery
- We value Integrity

1.3. For more information, see: www.sprep.org.

2. Specifications: statement of requirement

2.1. SPREP wishes to call for tenders from qualified and experienced contractors who can offer their services the repackaging, loading, stowage, and international disposal of DDT and PCB waste from Papua New Guinea (PNG).

2.2. The Terms of Reference (TOR) for the consultancy are set out in Annex A.

2.3. The successful contractor must supply the services to the extent applicable, in compliance with SPREP's Values and Code of Conduct: https://library.sprep.org/sites/default/files/sprep-organisational-values-code-of-conduct.pdf. Including SPREP's policy on Child Protection, Environmental Social Safeguards, Fraud Prevention & Whistleblower Protection and Gender and Social Inclusion.

2.4. SPREP Standard Contract Terms and Conditions are non-negotiable

3. Conditions: information for applicants

3.1. To be considered for this tender, interested contractors must meet the following conditions:

i. **Submit a detailed Curriculum Vitae:** The CV should detail the qualifications and previous relevant experience for each proposed personnel, particularly in the repackaging, loading, stowage, and international disposal of hazardous chemicals like DDT and PCB.

ii. **Provide three relevant referees**: Include contact information and details of the most recent similar work completed by the contractor, relevant to this tender.
iii. **Complete the tender application form provided** (Please note you are required to complete in full all areas requested in the Form, particularly the Statements to demonstrate you meet the selection criteria – DO NOT refer us to your CV. Failure to do this will mean your application will **not** be considered).
iv. **Provide examples of past related work outputs:** Submit examples of previous work related to hazardous waste management, particularly involving Persistent Organic Pollutants (POPs) such as DDT and PCB.
v. **Submit Technical and Financial proposals:** These may be attached separately to the tender application. The technical proposal should outline the methodology, work plan, and risk mitigation strategies, while the financial proposal (complete **Annex C**) should provide a detailed cost breakdown.
vi. **Demonstrate compliance with local and international regulations:** The contractor must show evidence of compliance with national and international legislation standards and norms applicable to hazardous waste management, including those specified under the Basel, Waigani and Stockholm Conventions.
vii. **Meet local registration requirements:** Contractors must provide proof of their company registration and authorisation to operate in PNG, as well as adherence to any other legal requirements specific to the project's location.
viii. Bidders must provide written confirmation committing to secure and submit insurance coverage as specified in Section 5.12.2 if selected for the award.
ix. Provide International Organization for Standardization (ISO) certification or its equivalent as specified in the TOR.
x. Provide copies of valid licenses to operate treatment and disposal facilities and details of the operating license. Documents to be in the English language.
xi. Written declaration to confirm whether they have had any breaches of authorisations in the past five years and if yes, provide details on corrective actions/measures undertaken
xii. Written confirmation to confirm whether they have any outstanding environment litigations and if yes, provide details of the litigations and the contingent liability.
xiii. Submit audited Financial statements for the last three years preceding December 2022
xiv. Signed agreements/letters of commitment where a bid is submitted in a partnership, consortium or joint venture with different companies or subcontractors for Disposal services, Site services, Shipping and haulage, Local agents etc

3.2 Tenderers must declare any areas that may constitute conflict of interest related to this tender and sign the **conflict-of-interest form** provided.

3.3 **Tenderer is deemed ineligible due to association with exclusion criteria, including** bankruptcy, insolvency or winding up procedures, breach of obligations relating to the payment of taxes or social security contributions, fraudulent or negligent practice, violation of intellectual property rights, under a judgment by the court, grave professional misconduct including misrepresentation, corruption, participation in a criminal organisation, money laundering or terrorist financing, child labour and other trafficking in human beings, deficiency in capability in complying main obligations, creating a shell company, and being a shell company.

3.4 Tenderer must sign a declaration of **honour form** together with their application, certifying that they do not fall **into** any of the exclusion situations cited in 3.3 above and where applicable, that they have taken adequate measures to remedy the situation.

4. Submission guidelines

4.1. Tender documentation should demonstrate that the interested contractor satisfies the conditions stated above and in the Terms of Reference and is capable of meeting the specifications and timeframes. Documentation must also include supporting examples to address the evaluation criteria.

4.2. Tender documentation should be submitted in English and outline the interested contractor's complete proposal:

a) **SPREP Tender Application form and conflict of interest form.** *(Please note you are required to complete in full all areas requested in the Form, particularly the Statements to demonstrate you meet the selection criteria – DO NOT refer us to your CV. Failure to do this will mean your application will **not** be considered).*
Provide examples of past related work outputs
For the Technical and Financial proposals you may attach these separately.

b) **Honour form**

c) **Curriculum Vitae** of the proposed personnel to demonstrate that they have the requisite skills and experience to carry out this contract successfully.

d) **Technical Proposal** which contains the details to achieve the tasks outlined in the Terms of Reference.

e) **Financial Proposal** – provide a detailed outline of the costs involved in successfully delivering this project submitted in United States Dollars (USD) and inclusive of all associated taxes. Complete form provided, refer **Annex B**.

f) Written declarations, licenses and audited financial statements as outlined in 3.1 above

g) Where relevant provide:

i. Business registration/license (For Entities/ Individual contractor's as per relevant national legislations)

ii. Tax Identification Number (TIN) Letter (If applicable for Individual contractor's as per relevant national legislations)

4.3. Provide three referees relevant to this tender submission, including the most recent work completed.

4.4. Tenderers/bidders shall bear all costs associated with preparing and submitting a proposal, including cost relating to contract award; SPREP will, in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.5. The tenderer/bidder might be requested to provide additional information relating to their submitted proposal, if the Tender Evaluation Committee requests further information for the purposes of tender evaluation. SPREP may shortlist one or more Tenderers and seek further information from them.

4.6. The submitted tender proposal must be for the entirety of the Terms of Reference and not divided into portions which a potential tenderer/bidder can provide services for.

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

4.8 Tenderers must insist on an acknowledgement of receipt of tender.

5. Tender Clarification

5.1. a. Any clarification questions from applicants must be submitted by email to procurement@sprep.org before 15 October 2024. A summary of all questions received complete with an associated response posted on the SPREP website www.sprep.org/tender by 18 October 2024.

b. The only point of contact for all matters relating to the RFT and the RFT process is the SPREP Procurement Officer.

c. SPREP will determine what, if any, response should be given to a Tenderer question. SPREP will circulate Tenderer questions and SPREP's response to those questions to all other Tenderers using the SPREP Tenders page (**https://www.sprep.org/tenders**) without disclosing the source of the questions or revealing any confidential information of a Tenderer.

d. Tenderers should identify in their question what, if any, information in the question the Tenderer considers is confidential.

e. If a Tenderer believes they have found a discrepancy, error, ambiguity, inconsistency or omission in this RFT or any other information given or made available by SPREP, the Tenderer should promptly notify the Procurement Officer setting out the error in sufficient detail so that SPREP may take the corrective action, if any, it considers appropriate.

6. Evaluation criteria

6.1. SPREP will select a preferred contractor on the basis of SPREP's evaluation of the extent to which the documentation demonstrates that the tenderer offers the best value for money, and that the tender satisfies the following criteria:

6.2. A proposal will be rejected if it fails to achieve 70% or more in the technical criteria and its accompanying financial proposal shall not be evaluated.

I. Technical Score – 80%
Refer to Annex B for Technical Proposal

II. Financial Score – 20%
Refer to Annex C for Financial Proposal

The following formula shall be used to calculate the financial score for ONLY the proposals which score 70% or more in the technical criteria:

$$\text{Financial Score} = a \times \frac{b}{c}$$

Where:
a = maximum number of points allocated for the Financial Score
b = Lowest bid amount
c = Total bidding amount of the proposal

7. Variation or Termination of the Request for Tender

7.1 a. SPREP may amend, suspend or terminate the RFT process at any time.

b. In the event that SPREP amends the RFT or the conditions of tender, it will inform potential Tenderers using the SPREP Tenders page (https://www.sprep.org/tenders).

c. Tenderers are responsible to regularly check the SPREP website Tenders page for any updates and downloading the relevant RFT documentation and addendum for the RFT if it is interested in providing a Tender Response.

d. If SPREP determines that none of the Tenders submitted represents value for money, that it is otherwise in the public interest or SPREP's interest to do so, SPREP may terminate this RFT process at any time. In such cases SPREP will cancel the tender, issue a cancellation notice and inform unsuccessful bidders accordingly.

8. Deadline

8.1. **The due date for submission of the tender is: 06 November 2024, midnight (Apia, Samoa local time).**

8.2. Late submissions will be returned unopened to the sender.

8.3 Please send all tenders clearly marked 'RFT: GEFIS 2024/004: **Repackaging, loading, stowage and international disposal of DDT and PCB waste from Papua New Guinea**

Mail: SPREP
Attention: Procurement Officer
PO Box 240
Apia, SAMOA

Email: tenders@sprep.org (MOST PREFERRED OPTION)

Fax: 685 20231

Person: Submit by hand in the tenders' box at SPREP reception,
Vailima, Samoa.

Note: Submissions made to the incorrect portal will not be considered by SPREP. If SPREP is made aware of the error in submission prior to the deadline, the applicant will be advised to resubmit their application to the correct portal. However, if SPREP is not made aware of the error in submission until after the deadline, then the application is considered late and will be returned unopened to the sender.

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

SPREP reserves the right to enter into negotiation with respect to one or more proposals prior to the award of a contract, split an award/awards and to consider localised award/awards between any proposers in any combination, as it may deem appropriate without prior written acceptance of the proposers.

A binding contract is in effect, once signed by both SPREP and the successful tenderer. Any contractual discussion/work carried out/goods supplied prior to a contract being signed does not constitute a binding contract.

For any complaints regarding the Secretariat's tenders please refer to the Complaints section on the SPREP website http://www.sprep.org/accountability/complaints

Annex A: Terms of Reference

Repackaging, loading, stowage and international disposal of DDT and PCB waste from Papua New Guinea (PNG)

1. Background

The Secretariat of the Pacific Regional Environment Programme (SPREP) is working with the United Nations Environment Programme (UNEP), and 14 Pacific Island Countries to undertake the Global Environment Facility (GEF) funded ISLANDS Pacific Child Project which aims to prevent the future build up of hazardous chemicals and to manage and dispose existing harmful chemicals across the Pacific.

ISLANDS will focus on establishing effective mechanisms to control the imports of chemical products that lead to the generation of hazardous waste and to clean up the Pacific of legacy chemicals. For unavoidable chemicals that serve as important economic products, ISLANDS will seek to establish circular and life cycle systems in partnership with the private sector, so a buildup of these chemicals is avoided.

Chemicals and hazardous waste streams targeted by ISLANDS include Persistent Organic Pollutants (POPs) such as DDT and PCBs, mercury, e-waste, used oil, plastics and end-of-life vehicles (ELVs).

Pacific Islands Countries (PICs) participating in the ISLANDS Pacific Child Project are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

2. Introduction to project

The GEF ISLANDS Pacific Project in Papua New Guinea (PNG) focuses on addressing the challenges posed by legacy Persistent Organic Pollutants (POPs), specifically Dichlorodiphenyltrichloroethane (DDT) and Polychlorinated Biphenyls (PCBs). These hazardous chemicals were widely used in the past for various applications, including malaria control and electrical equipment, but have since been recognized for their detrimental effects on human health and the environment. The project aims to safeguard and dispose of up to 20 metric tonnes of legacy DDT, which was originally procured in the 1960s or 1970s by the PNG Department of Health, and to manage PCB-contaminated equipment and oil stored at the PNG Power Moitaka Sub-Station in the National Capital District (NCD).

The DDT waste is currently stored in deteriorating conditions within two 20-foot shipping containers located near Nonga General Hospital. The containers, which hold approximately 6 metric tonnes of DDT each, have been subject to pilfering and require urgent repackaging and secure storage. Additionally, an inventory of PCB-contaminated oil and equipment at the PNG Power Moitaka Sub-Station will be updated to facilitate their safe repackaging, transportation, and disposal.

This project will be implemented through a collaborative effort between the United Nations Environment Programme (UNEP) as the Implementing Agency and the Secretariat of the Pacific Regional Environment Programme (SPREP) as the Executing Agency. Local coordination and support will be provided by the Conservation and Environment Protection Authority (CEPA) who serve as the project National Focal Points. The project will ensure compliance with both national and international legislation, standards, and norms to achieve environmentally sound management and disposal of the hazardous waste.

3. Objectives

The primary objectives of this tender are the:

(i) Safe repackaging, loading, stowage, transport and international disposal by an environmentally sound method of up to 20 tonnes of DDT powder and other DDT contaminated wastes from Papua New Guinea.

(ii) Testing of PCB in used oil and equipment currently stored in the PPL Moitaka Sub-Station in the National Capital District

(iii) If the testing in (ii) confirms PCB contamination (>50 ppm), proceed with the safeguarding, national transport, and international disposal of PCB-contaminated oils and equipment. If no PCB contamination is detected, no further action on the PCB component will be necessary.

4. Technical Specifications and Performance Requirements

4.1 Site Locations and Descriptions

4.1.1 DDT Waste

Waste Description

The DDT was procured in the early 1960s or 1970s by the Department of Health for Malaria Control from overseas. The origin is not known as there is no remaining record of the source. The ownership of the DDT was the National Department of Health. The DDT is packaged into 35kg boxes of which there are estimated to be 175 in each shipping container. Due to negligence, the DDT stockpile has been subject to pilfering and deterioration in condition.

Figure 1: Opened 20kg bags of DDT before they were repacked and safeguarded in 2019 by SPREP and UNEP.

Figure 2: The two containers holding the DDT waste in Rabaul, East New Britain Province.

Site location and description

The waste is currently being store in two 20ft shipping containers at Lat -4.162920°, Long 152.148500°which is approximately 500m due south of the Nonga General Hospital. The shipping containers are situated approximately 110m west of the main Nonga road on rough / waste ground behind the Balanataman Local Government Building. Each of the shipping containers contains about 6 metric tons of DDT.

Figure 3: Location of the DDT at the back of the Balanataman Local Level Government building

Electricity and water are available to the site. To prevent vandalism and pilfering the doors to the shipping containers have been welded closed with reinforcing bar. Outside of the shipping containers, the site is not contained within a lockable fence and is not secure. Lifting equipment or forklift is available in nearby Rabaul town or Kokopo. The main Nonga road is accessible to 20 tonnes vehicles, and the road leading to the DDT storage site is sealed.

4.1.2 PCB and associated wastes

Waste description.

PCBs were historically used in transformer oils and other electrical equipment by PNG Power Limited (PPL) due to their stability, non-flammability, and excellent dielectric properties. These oils play a crucial role in providing insulation, cooling, and protection to the transformers and other power generating equipment. Although PNG Power has ceased using oils susceptible to PCB contamination, the issue persists when old transformers containing PCB oils are brought back into service or when contaminated oils are reused in newer transformers. Currently, the oils suspected of PCB contamination are stored in several tanks at the PNG Power Moitaka Power Station in the National Capital District (NCD), and retesting is required to confirm the presence or absence of PCBs. The project aims to safely repackage, transport, and dispose of these oils in compliance with international standards to mitigate any potential environmental and health hazards.

Figure 4: PCB contaminated oil is stored in Tank 1 estimated at 400 000L. The tanks are in a bunded area.

Figure 5: The remaining 20,000L of PCB contaminated oils are stored in this tank that is outside in the yard.

Site locations and description.

The Moitaka Power station, located at the back of the former Port Moresby showgrounds, serves as the primary site for the storage of PCB-contaminated oils in Papua New Guinea. This power station is a critical hub in the nation's electrical grid, housing a variety of storage tanks specifically designated for the containment of hazardous oils. The bulk of oils suspected of PCB-contamination are stored in a 400, 000-liter Tank and substantial 200,000-liter storage tank, while the remainder is held in three (3) smaller 5,000-liter tanks and a 20,000-liter tank. The 200,000-liter tank is equipped with a drain valve and nozzle for easy drainage, facilitating efficient handling and transfer of the oils. All tanks, except for the 20,000-liter one, are situated within a bunded area and equipped with spill containment facilities and equipment to prevent any accidental release and ensure environmental protection. After emptying the tanks from the PCB contaminated transformer oils, the tanks will be re-used for other purposes.

The Moitaka Power Station site is accessible by sealed road. It can now be accessed from the new Gerehu to 9 Mile road, enhancing the logistical ease of transporting PCB to the new port at Motukea. The facility is well-equipped with electricity and water supplies, and staff houses are located nearby, ensuring that essential utilities and accommodations are available for personnel. The site's expansive layout is adequate to accommodate large lifting and moving vehicles, which is critical for the safe and efficient handling of the storage tanks during the repackaging and disposal operations. These technical and logistical provisions underscore the site's capability to support the complex requirements of managing and disposing of PCB-contaminated oils, in line with international safety and environmental standards.

Figure 6: The location of the PNG Power Moitaka Powerstation

4.2 Legislation, Standard and Norms

The Bidder shall ensure that all National and International legislation, standards and norms applicable to the work activities are applied.

5. Provision of services required

The Bidders are required to make provision for the following services which are described in more detail in the following sections below:

- Site Preparation and Preliminary Programme
- Provision of Necessary Personnel

- Provision of Necessary Materials and Equipment
- Construction of temporary working enclosures
- Repackaging of waste and temporary storage
- Volume reduction and repackaging of contaminated cardboard
- Supply of Shipping Cargo Units (SCUs)
- Labelling of Waste
- Waste verification
- Loading and Stowage of Waste into SCUs
- Inventory update and materials movement log
- Cleaning of stores following safeguarding
- Selection of Disposal Facility and final Destruction of Waste
- Transportation and Trans-frontier Shipment of Waste
- Provision of insurances
- Health, Safety and Environmental protection

5.1 Site Preparation and Preliminary Programme

5.1.1 Specifications

The Bidder shall include a preliminary Programme in their Bid. The preliminary Programme shall describe the general methods, arrangements, order, and timing for all work and activities. The preliminary plan should include a risk assessment for the PCB inventory and general repackaging methods encountered during repackaging of DDT and PCB. The risk assessment should describe mitigation measures for the risks identified (for example exposure to heat and toxic dusts). The preliminary Programme and required components shall be consolidated and detailed at the commencement of the work.

5.1.2 Performance Criteria

The Bidder shall in their Bid describe how they intend to prepare and manage the Site.

The preliminary Programme shall therefore include site maps (scale 1: 200) showing the site boundary, and describe the following issues (list is not exhaustive):

Site Plan

1) Entrance facilities
2) Signs and signposts
3) Existing buildings and structures
4) Location of temporary working enclosures
5) Site zoning (clean / intermediate/ contaminated)
6) Location of changing station
7) Location of where plant and equipment are to be stored
8) Location of temporary waste storage areas
9) Location of Emergency Meeting Points
10) Single point of entry and exit for personnel
11) Entry and exit point for plant and equipment
12) Location of mess / break facilities
13) Location of emergency equipment including the type, quantity and location of fire extinguishers, location of emergency eyewash equipment and emergency showering arrangements
14) Location of laboratory if confirmation analysis of treated samples will be done on site.

Management Plans

15) Health, Safety and Environment Plan, to include:
    a. Safeguarding plan and methods (repackaging and temporary storage, loading, stowage and transport)
    b. Planning for protection of the Environment see
    c. Risk Assessment & Emergency Preparedness and Response Plan (EPRP)

16) Traffic Management Plan
17) Disposal Plan
18) Transport and logistics Plan

Time Schedule

19) Overall time schedule including Gant chart

The preliminary Program shall furthermore describe how the Bidder will provide water supply, electricity and telecommunication to the Site, and how it will dispose of wastewater and solid waste from staff, office and laboratory facilities, if required.

5.2 Provision of Necessary Personnel

5.2.1 Specifications

The Contractor will provide personnel for the sampling of **PCB (the sampling of DDT is not required)** and supervision of safeguarding, loading and stowage and transport of the waste at the locations specified.

The DDT and PCB contaminated wastes subject to the works are regarded as being toxic to human health and the environment. The Bidder shall therefore include staff members in the proposed team who have adequate experience with all aspects of the safeguarding of hazardous materials including POPs chemical waste.

5.2.2 Performance criteria

The following Profiles are regarded as necessary expertise for a professional works implementation:

Profile	**General Experience**	**Specific Experience / qualifications**
General / Project Manager (on or off site)	Degree/Diploma in Engineering or related natural sciences. More than 5 years of experience with general hazardous waste management and disposal. Fluent in English and Tok Pisin	Experience in the management and disposal of POPs contaminated wastes from a least 3 similar projects.
Safety Officer (on or off site)	More than 5 years of experience working within industry. Fluent in English and Tok Pisin	> 5 yrs. qualified as safety officer, Occupational Health and Safety (OSHA)
Field Supervisor (full time on-site)	Degree/Diploma. in Engineering / Chemistry and / or related scientific subject. More than 5 years of general experience with hazardous waste management and disposal. Fluent in English and Tok Pisin	Experience as a site manager including the management and disposal of POPs contaminated wastes from at least 3 similar projects. Experience with risk management, environmental protection measures and occupational health and safety issues in relation to hazardous waste are essential. Must have current certificates in International Maritime Dangerous Goods (IMDG), Agreement of Dangerous Goods by Road (ADR) and First Aid.
Repackaging technicians (full time on-site)	Technical diploma. More than 3 years of general experience	Experience in the management and disposal of POPs contaminated wastes from a least 3

Profile	General Experience	Specific Experience / qualifications
(number according to Bidders work schedule)	with hazardous waste management and disposal. Fluent in English and Tok Pisin	similar projects. ADR and First Aid.

The Bidder should provide proof of qualifications, training and experience as part of the bid. The Bidder shall prepare the repackaging personnel for the works implementation and ensure appropriate instructions are given in the working methods. Provision should be made for back-up if a staff member has to be recalled from work or is unable to participate in the works.

5.3 Provision of Necessary Materials and Equipment

5.3.1 Specifications

The Bidder shall as part of the offer identify and provide a breakdown of all equipment, tools etc. required for the repackaging, loading, stowage and transportation operations for each of the 3 phases of the work. The Bidder should make provision to provide equipment for its personnel as well as a person each from SPREP, CEPA, East New Britain Provincial Health Authority and PPL responsible for supervision during the works. The selected Bidder shall deliver all materials and equipment necessary for the work to each of the sites where safeguarding is required.

5.3.1 Performance Criteria

Details of the equipment and materials required for the work must be provided. Materials and equipment delivered to sites should be in a condition satisfactory to undertake the work. Equipment to be used at the site should be broken down into the following categories:

i. Emergency Equipment (Emergency showering facilities, fire extinguishers etc.);
ii. Material handling and loading equipment (forklift, vacuums, plant etc.);
iii. General site set-up equipment (site zoning, environmental protection);
iv. Electrical equipment, Bidders should describe methods for electrical safety in compliance with EU regulations;
v. Personal Protective Equipment (see Health, Safety and Environment [HSE] Plan below), PPE should take into consideration potential risks identified such as dust and heat. Bidders to specify type / specification and quantity for each phase of the work;
vi. UN packaging approved for wastes to be carried. The Contractor should ensure that appropriate packaging materials and packaged types are used and to ensure their chemical and mechanical compatibility with the waste type in accordance with the packaging's UN *Certification of Packaging Performance*. Bidders should supply in their bids the certification for each UN package type intended for use. Bidders should take into consideration:
    a. The waste classification;
    b. Expiry date of plastic packaging;
    c. Other requirements including specification of packaging to allow double stacking and loading during storage and transport.

5.4 Repackaging of waste and temporary storage

5.4.1 Specifications

DDT Waste

The Contractor will carry out repackaging of the DDT and associated wastes referred to in Section 4.1.1. Work will entail placing the existing containers of DDT into new UN approved packaging. Additionally, the wooden floors of both shipping container will be broken out and repacked for shipping and

disposal with the rest of the DDT waste. All repackaging activities shall be performed inside the designated zones, described on the Site Map and in the method of works. If the repackaging is planned to take place outside these, the Bidder shall in the offer describe how he will ensure that no secondary contamination of the soil and surface- and/or ground water can take place.

PCB Waste
Bidders will make provision for the draining and repackaging of PCB contaminated oil from storage tanks at the Moitaka Powerstation.

Work will entail draining PCB-contaminated oils from existing storage tanks into new UN-approved containers for shipping and disposal. The 200,000-liter storage tank, equipped with a tap, will facilitate controlled drainage, while smaller tanks will be managed using appropriate pumping equipment. All draining activities shall be performed within designated containment zones to prevent any secondary contamination of soil and surface- or groundwater, as described on the Site Map and in the method of works. If draining is planned to occur outside these zones, the Bidder shall describe in their offer how they will ensure environmental protection and spill containment.

5.4.2 Performance criteria

DDT Waste

The Bidders will describe in detail all the methods required to repackage the waste in the HSE plan and carryout a detailed risk assessment of each method. The Contractor will ensure that all mitigation measures, identified by risk assessment are introduced during works as required by the HSE plan.

Newly filled UN packages will be passed from Zone 1 (high risk zone) into zone 2 (Medium risk zone) until such time as onward transport has been arranged. The Contractor will ensure that the temporary storage areas remain free of DDT residues and other wastes. Additionally, the Contractor will ensure that the ground in the temporary storage areas is not damaged by the movement of personnel, materials and equipment or heavy machinery.

PCB Waste

The execution of PCB-related tasks is contingent upon the results of the lab analysis conducted under Section 5.4.3 Testing of PCB. Phase 2 of the PCB work, including repackaging, loading, stowage, and disposal, will only commence if Phase 1 confirms the presence of PCB contamination in the transformer oils. If the test results show no PCB contamination, the contractor will not be required to perform any PCB-related tasks, and only the DDT-related components will be execute

Draining and repacking of waste items will be completed by the Contractor at the Moitaka Power Station site only, where all PCB-contaminated oils from transformers have already been drained and are currently stored in several tanks. The majority of the oils are contained in a 200,000-liter storage tank, with additional quantities stored in smaller 10,000-liter tanks and a 20,000-liter tank. The Contractor will work closely with PPL, adhering to their OHS policies as this is a restricted site.

Prior to repackaging, the Team will set up environmental protection measures and site zoning as outlined in the generic plan and methodology described by the Contractor in the Health, Safety, and Environment Plan. For each protection zone (1, 2, or 3), the safeguarding team members will wear appropriate protective equipment as described in the method of works.

Once site setup and environmental protection measures have been completed, the Team will commence repackaging works. The PCB-contaminated oil will be transferred from the storage tanks into new metal UN-specified drums for onward transport. The Contractor should ensure that sufficient ullage space remains (~10% volume) to allow for expansion of oils during transport. The Contractor will ensure that, once drained and ready for loading, all containers and equipment are clean of any contaminated

oil on their external surfaces. Electrical equipment not drained should be subject to containment as set out in Section 5.9.2. All contaminated wastes generated during repackaging should be collected for disposal with the rest of the consignment.

Newly filled UN packages will be transferred outside the enclosures to a temporary storage area until onward transport is arranged. The Contractor will ensure that the temporary storage areas remain free of PCB residues and other wastes. Additionally, the Contractor will ensure that the ground in the temporary storage areas is not damaged by the movement of personnel, materials, and equipment or heavy machinery.

It is emphasized that it is the Contractor's responsibility to ensure that appropriate packaging materials and types are used and to ensure their chemical and mechanical compatibility with the waste type in accordance with the packaging's UN Certification of Packaging Performance. The Bidder shall include in their bids the repackaging and disposal of contaminated packaging gained from the safeguarding of PCB and associated wastes in new UN-approved packaging. The Contractor must comply with PPL's OHS policies and work closely with PPL staff throughout the process to ensure safety and regulatory compliance.

5.4.3 Testing of PCB

The testing of PCB in transformer oils will be conducted in two phases. Phase 1 will involve the sampling and lab analysis of transformer oils to determine the presence and concentration of PCBs, following internationally recognized protocols. If the analysis confirms PCB contamination (i.e., concentration >50 ppm), Phase 2 will be triggered, allowing for the repackaging, loading, stowage, and disposal of PCB-contaminated oils as outlined in the relevant sections of this TOR. If the analysis indicates that the transformer oils are free of PCB contamination, no further work related to PCBs will be carried out, and the contractor will proceed with DDT-related tasks only.

Specifications

The Contractor is required to conduct sampling and analysis of the used oil stored in the tanks at the PNG Power Moitaka Power Station to test for the presence and concentration of PCBs. The sampling and analysis must be carried out using internationally recognized protocols to ensure the accuracy and reliability of the results.

- **Sampling Methodology:** The Contractor shall collect samples from each storage tank containing PCB-contaminated oil in accordance with **EPA Method 8082A**. This method provides guidelines for the proper collection, handling, and transportation of samples to avoid cross-contamination and degradation.
    - **Sample Collection:** Samples should be collected using clean, non-contaminating sampling equipment to ensure representativeness. In cases where there is a concern about stratification, composite samples should be collected from different levels within the tank.
    - **Sample Containers:** Use glass containers with Teflon-lined caps, ensuring they are pre-cleaned and certified for PCB sampling to prevent contamination.
    - **Sample Preservation:** Samples should be stored at 4°C (39°F) and protected from light until analysis is performed.
- **Sample Analysis:** The collected samples shall be analyzed for PCB concentrations at an accredited laboratory using **EPA Method 8082A**. This method employs Gas Chromatography with an Electron Capture Detector (GC-ECD) for the detection and quantification of PCBs in

the oil samples.

  - **Accreditation:** The laboratory must be accredited to ISO/IEC 17025 or an equivalent standard, ensuring it meets international requirements for testing and calibration.

  - **Quality Control:** The laboratory shall include quality control measures, such as blanks, duplicates, and standard reference materials, to validate the accuracy and precision of the analysis.

- **Reporting:** The Contractor must provide a detailed report of the PCB test results, including the concentrations detected in each sample, the methodologies used, and any relevant observations. The results should be reported in milligrams per kilogram (mg/kg) or parts per million (ppm). The report must be submitted to the GEF ISLANDS Pacific, Project Manager before proceeding with the repackaging and disposal of the PCB-contaminated oils.

- **Compliance:** All sampling, handling, and analysis procedures must comply with relevant national and international regulations, including the Basel and Stockholm Conventions' requirements for PCB management.

Performance Criteria

The performance of the Contractor will be evaluated based on the following criteria:

- **Adherence to Protocol:** The Contractor must strictly follow EPA Method 8082A and other approved protocols to ensure accurate and reliable results.

- **Timeliness:** The sampling, analysis, and reporting of PCB concentrations must be completed within the agreed-upon timeframe to avoid delays in the project schedule.

- **Accuracy of Results:** The test results must be accurate and reflect the true concentration of PCBs in the stored oils. Any discrepancies or errors in the analysis must be promptly addressed.

- **Documentation:** The Contractor must maintain comprehensive records of the sampling and testing process, including all relevant documentation and communications with the accredited laboratory.

The results of the PCB testing will inform subsequent steps in the management and disposal process, ensuring that all activities are conducted in compliance with environmental safety standards.

5.5 Labelling of Waste

5.5.1 Specifications

The Bidder shall repackage / prepare for transport the DDT and DDT associated wastes to this Technical Specification in order to ensure safe transport to the final disposal destination.

5.5.2 Performance Criteria

Labelling equipment and labels for all packages should be provided by the appointed Contractor and be placed on each outer package prior to waste verification. The Contractor shall ensure that all packages of safeguarded waste have been labelled according to the requirements of the IMDG Code. The Proper Shipping Names included on the labels must clearly indicate that the material is ‘WASTE’ and should include all warning signs according to the hazards for each type of waste. The labels should be able to withstand 3 months emersion in sea water as per the IMDG requirements.

5.6 Waste verification

5.6.1 Specifications

The Contractor will be required to accept full responsibility for the wastes designated for disposal abroad prior to them being loaded into SCUs for onward transport. With the transfer of responsibility is a transfer of future liability in case of accident.

5.6.2 Performance Criteria

Prior to loading onto the SCUs, each package will be weighed. Annex C to this Technical Specification sets out the weighing procedure and operating documentation for agreeing the net weight against which the project's liability for disposal costs will be. The Contractor should provide a set of certified scales for weighing pallets, drums and equipment with a certified accuracy of ± 0.5kg. The Contractor is required to specify any additional requirements necessary to facilitate the transfer of the responsibility of the wastes from the Government to the Contractor. The liability transfer should take place at the place of weighing and waste acceptance and before loading into SCUs and transportation to the port of export.

The Contractor will be held liable for any incident as a result of failure to verify the correct type of packaging subsequent to waste acceptance by the Contractor. The Contractor should also verify that the packaging selected complies with the acceptance requirements of the shipping companies and of the disposal facility (e.g. furnace loading) and international regulations. Any incremental costs due to incorrect use of incompatible packaging will be for the account of the Contractor.

5.7 Loading and Stowage of Waste into SCUs

5.7.1 Specifications

DDT waste

Following the required repackaging activities, the Contractor will be responsible for loading of all waste into SCUs for onward transport to the final point of disposal or treatment. The Contractor is also responsible for properly securing the cargo so that no damage occurs during shipment.

PCB waste

The Contractor will be responsible for the repackaging of PCB-contaminated oil stored at the Moitaka Power Station. The oils have already been drained from transformers and are currently stored in designated tanks at the site. The Contractor will transfer the PCB-contaminated oil into new UN-approved metal drums. Once repackaging is completed, the Contractor will load all repackaged PCB waste into SCUs for transport. Proper securing of the cargo must be ensured to prevent any damage or leakage during shipment.

5.7.2 Performance Criteria

DDT and PCB waste

The Contractor will ensure that wastes are correctly placed into SCUs for transportation according to the provisions of the IMDG and Basel and Stockholm Conventions. The repackaged wastes should be fixed with adequate dunnage consisting of wooden structures, straps and/or airbags as required into the SCUs before transport according to the recommendations set out in the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units. The Contractor will ensure that placards are placed on SCUs according to international labelling requirements for hazardous waste.

Cranes or forklift trucks to facilitate loading of the SCUs will be provided by the Contractor. The Organization shall pay no additional demurrage charges in cases where delays in the loading of the SCUs can be attributed to the failure of the Contractor or their appointed local freight forwarder. The Contractor shall supply the Project Manager's representative with a certificate of container packaging confirming that the load in each SCU is secure and complies with the requirements of the IMDG and the shipping line.

All placarding will be completed by the Contractor in full compliance with the requirements of the IMDG code.

The Project Manager's representative will facilitate the completion of all export formalities with the relevant authorities, but the Contractor will remain liable for all costs associated with export of the waste from the country. The final responsibility for completion of all export formalities rests with the Contractor. Costs associated with delays due to completion of customs formalities will be the responsibility of the Contractor.

The work plan developed by the Contractor and approved by the Project Manager's representative should schedule the loading by the contractor of the safeguarded wastes into SCUs following repackaging activities.

PCB Waste

The Contractor will supply all materials necessary for safe loading, stowage and transport onto transport vehicles or into SCUs. The Contractor will ensure that PCB wastes are correctly placed for transport according to the provisions of the IMDG and Basel and Stockholm Conventions. In addition to the provisions of the Basel and Stockholm Conventions, all liquid and solid wastes should be placed inside a steel leak proof drip-tray. The liquid containment volume should be at least 110 per cent of the liquid waste volume, considering the space taken up by stored items in the containment area. The repackaged wastes should be fixed with adequate dunnage consisting of wooden structures, straps and/or airbags as required before transport according to the recommendations set out in the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units. The Contractor will ensure that placards are placed onto vehicles or the outside of SCUs according to international labelling requirements for hazardous waste.

Cranes or fork-lift trucks required to facilitate loading of the vehicles or SCUs will be provided by the Contractor. The Project shall pay no additional demurrage charges in cases where delays in the loading of the SCUs can be attributed to the failure of the Contractor or their appointed local freight forwarder.

5.8 Inventory update and materials movement log

5.8.1 Specifications

The Bidder shall keep a record of the waste repackaged for disposal during the works.

5.8.2 Performance Criteria

During the work, the Contractor shall keep a detailed record (either hard or soft copy) of all repackaged items, this should include:

- Unique item identification number for each package;
- Identity of all active ingredients contained within the package, for example: (DDT 75%);
- UN Number (UNNO), for example only: 2761;
- UN Proper Shipping Name (PSN), for example: WASTE ORGANOCHLORINE PESTICIDE, SOLID, TOXIC N.O.S.;
- UN Package type, for example FIBC or 210L plastic drum;
- UN Packaging group (PG), for example: PG II;

- Location (to be updated on movement), for example: XXX Store or Shipping Container Unit Number.

The updated inventory should always be kept available for inspection and be provided to the Project Manager as part of the final report.

5.9 Cleaning of stores following safeguarding

5.9.1 Specifications

Following safeguarding the contractor shall ensure that the stores and / or locations of where wastes have been removed from will be cleaned.

5.9.2 Performance criteria

Cleaning will entail:

- Collection of all refuse;
- Cleaning the floor of each store using a vacuum fitted with a HEPA filter;
- Washing of the floor using a suitable detergent. All washings generated during cleaning and refuse are required to be collected and disposed of with the rest of the consignment.

All materials and equipment required for the cleaning will be provided by the contactor.

5.10 Selection of Disposal Facility and final Destruction of Waste

5.10.1 Specifications

The Bidder shall destruct and/or neutralise the waste with appropriate method(s) at an appropriate facility.

5.10.2 Performance Criteria

The selected Bidder should ensure environmentally sound disposal of the waste, in conformance with *PNG Environment Act 2000*, and the regulations of the receiving country or equivalent. The Bidder selected is required to assign the most technologically and environmentally sound disposal option for the waste, subject to acceptance by the Client and the Government and in compliance with the Basel and Stockholm Conventions.

In the bid, Bidders should provide details of:

- The proposed technology: location; type of technology; the destruction efficiency of the proposed technology; details demonstrating the compliance to the requirements of the Basel and Stockholm Conventions
- The relevant national norms or the regulations of the receiving country, whichever are the most stringent;
- The scope of the license / authorization to operate, focusing on emission limits to air, water and ground;
- The licensing authority for the disposal facility with a contact point with e-mail address;
- Details of any breaches of authorizations in the past five years;
- Details regarding any outstanding environmental litigation;
- Track records of the destruction facility providing evidence of experience in the environmentally sound disposal for waste similar to DDT and PCB and within emission limits set in the operating license, to include type of hazardous waste, annual quantities disposed of, operations restrictions to include chlorine contents, etc.;
- Details on the operating license: Company name; license number; date of issuance; licensing authority for the disposal facility with a contact point with e-mail address; scope of the operating license / authorization to operate for similar waste focusing on emission limits to air, water and solids;
- Standards of operation;

- Safety records providing details of any accidents at the disposal facility for the last 5 years should be disclosed and reasons for the accidents provided.
- ISO 9001 and ISO 14001 certificates for the facility

5.11 Transportation and Trans-frontier Shipment of Waste

5.11.1 Specifications

The project will be responsible for the provision and international shipping of SCUs for both for the DDT wastes and for the PCB wastes. The Contractor will be responsible for the following services:

- the transport of the container ("box") from the pick-up depot to the place it is to be loaded ("stuffed"). The shipper/contractor will be responsible for storage
- the loading and sealing of the box at the place of stuffing
- the transport of the box once stuffed back to the load port, and then it's loading onto the ship (so stevedores, craneage, lashing etc.)
- the unloading of the box from the ship (so stevedores, craneage, lashing etc.) at the disport,
- the transport of the "box" from the disport to the place it is to be unstuffed
- the unstuffing of the box
- the cleaning of the box back to its *status quo ante*
- ensuring the provision of ALL relevant Basel/Waigani/convention plus IMDG / Safety Data Sheet (SDS) Hazardous Materials (HazMat) paperwork at all relevant PICTs and their ports for the entire journey from current storage site to the consignee
- ensuring that the consignee is licensed to receive the box and its HazMat contents for a period of at least three months after the scheduled date of discharge.

5.11.2 Performance Criteria

Domestic transport

The project will be responsible for the provision of SCUs from Port Moresby and Kokopo. The Contractor will provide all vehicles, loading and transport equipment and drivers necessary for the domestic transport of repackaged DDT and PCB waste from the repackaging locations to the point of export.

The Contractor will be responsible for the supervision of all domestic transport and should guarantee that any transport of hazardous waste will follow all national and international transport regulations for movement of hazardous waste as set out by the FAO Environmental Management Tool Kit (EMTK) Volume 2 (Tool F)[1]. These guidelines are based on the European Regulations for transport of hazardous goods by road (ADR). The Contractor will also guarantee that any transport during the project will comply with national regulations. They should ensure that haulage companies, vehicles and drivers hired for the transportation comply with the regulations and that the drivers strictly follow traffic laws (e.g. speed limits) and take special precaution when driving through mountain terrain.

The Contractor will be required to develop detailed transport plans based on an objective and route specific risk assessment as described in the EMTK v2. The plans should provide all information on how to organize the stowage and transport of wastes from the central store to the point of export, including, the types and inspection of vehicles, the training of the drivers, the port of exportation, etc. in considering facilities and equipment provided as in-kind contribution by the Government.

Traffic and drivers' way of driving and the vehicles' condition poses a serious risk for the transport of hazardous waste. The FAO guidelines place a requirement for driver training, inspection of vehicles to meet safety standards, escorting of the load by relevant PNG authorities and representatives of the Contractor and provision of all safety documents in case of incident/accident. It also requires that a transport unit loaded with dangerous goods can be undertaken by flatbed truck without trailer or semi-

[1]Ibidem

trailer. The transport plan should also include an emergency plan in accordance with the FAO guidelines. The CEPA, PPL and relevant transport authority in PNG will assist the Contractor to list and analyse the routes presenting the lowest level of risk and to notify the relevant authorities about the transportation.

The vehicles will be required to use the predetermined routes as established in the transport plans. The inspection of the vehicles (especially tyres, brakes and stop/indicator lights) and of the drivers' competence (licence, training certificates, record of performance, etc.) as well as the responsibility for the transportation of the personnel, the equipment and the waste in full compliance with the national regulations and FAO guidelines rests with the Contractor. Vehicles not meeting the required standard for safe transport will not be authorised. Any incremental costs incurred by the Contractor due to supply of substandard vehicles will be for the account of the Contractor. Similarly, failure to follow prescribed regulations will result in all works being halted pending investigation by the NPC, all associated costs being charged to the Contractor.

It is important to note that the Contractor will be required to ensure that all insurances are in-place to cover all in-country and international transport risks.

International transport

International transport of shipping containers will be provided for by the project. In their bids, Bidders will inform the project of the number and size of shipping containers required. The shipping containers will be made available at Port Moresby. The Contractor should make the Project Manager aware of when the shipping containers will be required a minimum of two weeks prior to when they will be collected.

The Contractor will raise all notifications (on behalf each Government where export of waste is required) as directed by the Basel Convention (including the provision of the required Financial Guarantees). For purposes of the Basel or Waigani Convention Notification the project will supply the Contractor with details of the shipping route from Port Moresby to the port of import closest to the country of disposal.

The Contractor will also be required to place all financial guarantees with the competent authorities of destination and transit on behalf of the Governments.

Any charges related to the application shall be included in the Bidder's proposal. The CEPA will act as the Notifier on behalf of the government.

The Bidder shall in their time schedule allocate sufficient time for the necessary processing of applications of international and national transportation of dangerous goods.

5.12 Provision of insurances

5.12.1 Specification

As part of the Bid, the Bidders will be expected to prove that all parts of the work are covered by insurance. Indemnity will be seamless, that is the Contractor will assume liability for all aspects of work conducted under its control, including the actions and activities carried out by any sub-contractors used.
Bidders must provide written confirmation as part of their proposal a commitment to secure and submit insurance coverage as specified in Section 5.12.2 below if selected for the award.

5.12.2 Performance criteria

Insurance is required in the following areas (including the level of cover required):

Environmental Impairment	USD $20 million

Employer's liability	USD $10 million
General third-party liability	USD $10 million

Table 2: Insurance requirements

5.13 Health, Safety and Environmental protection

5.13.1 Specifications

The Bidder shall be responsible for all occupational health and safety and environmental protection issues related to the works, including of the repackaging, loading, transport and final disposal activities of the waste. The Bidder shall ensure that no additional contamination takes place and that all activities are assessed for environmental impacts before start of the activity.

Following the carrying out of risk assessment for each activity involved with the work, Bidders will specify how the works, including the type and quantity of materials and equipment required, are intended to be carried out with a minimum of risk to the environment.

All repackaging personnel shall - prior to starting the works - be given instruction and training in procedures where special risks to human health and/or the environment are involved. The repackaging personnel shall be instructed in the rules established, and the Bidder shall ensure that the procedures in case of incidents and accidents are understood. Only when the personnel have received the instructions and have signed that they understand the purpose and content the work, they may start work.

All workers shall be submitted to an initial medical check, focussed on the specific risks of the works execution. The medical check shall be repeated upon termination of the works.

All instructions for workers employed shall be presented orally and in writing and be understandable in the national language(s).

5.13.2 Performance Criteria

Preparation of HSE Plan

The Bidder shall in a separate management plan, or Health, HSE plan, describe how the health and safety of all activities and all personnel working on the Site will be ensured.

The plan shall also describe how the Contractor will ensure that no additional environmental impacts will occur, and how for all the working activities will ensure that adequate environmental protection measures are installed.

A format for the HSE plan is described in the [2]FAO Environmental Management Tool Kit (EMTK) volume No. 4. The HSE Plan should contain the following sections:

1. Background
2. Command structure

   The Bidder should set out the command structure for the project team and describe the responsibilities for each member. Bidders should also set-out emergency contact details for each member of staff.
3. Communications

   Bidders should describe how they will effectively implement on-site and off-site communications.

[2] http://www.fao.org/fileadmin/templates/obsolete_pesticides/Guidelines/EMTK4xweb_nov_small.pdf

4. Risk assessment

   Bidders should provide risk assessment of all tasks and activities to take place during the works and in each zone of the site.

5. Description of Work
   Bidders should describe in detail and in sequence the various activities involve in implementing the project. This should take into consideration the risk assessments conducted and measures required for mitigation of foreseen risks. The work plan should include a general description of all necessary activities and how each activity interconnects with others continuing at the same time. In order to mitigate the spread of contamination and to reduce its effect on human health and the environment the working area will be divided up into zones:

   - Clean low risk zone
   - Intermediate risk or buffer zone
   - High risk zone

   The HSE plan will describe how site zoning is to be used for risk mitigation and to minimise exposure to human health and the environment.

   The description of work should detail the use of required Personal Protective Equipment (PPE) and other equipment in each zone of the site as dictated by the risk assessment.

6. Transport planning (may be included as a separate plan or be part of the HSE plan)

   i. On-site transport
   The transport component of the operation poses the biggest potential risk to public health and the environment during safeguarding operations. It is therefore essential that the HSE plan includes details on the methodologies to be used for all transport during implementation of the safeguarding activities. This must include details of how repackaged materials will be moved around the site.
   ii. Off-site transport
   The Bidder should describe the transport of the repackaged materials from the work site to the port of export for shipment and the shipment to the final disposal facility.

7. Emergency Preparedness and Response Plan (EPRP)
   The Bidder shall be solely responsible for the safety of all activities including repackaging, transport and final disposal.

   As the work comprises management of chemical waste with a high potential danger, an Emergency Preparedness and Response Plan (EPRP) shall be part of the works activities. The EPRP Plan shall include the organization, responsibilities of the Bidders staff in case of accidents. The EPRP shall also describe methods for recording accidents and incidents and the steps involved for the improvement of activities in the event that any should occur.

   The EPRP should comprise two parts, first an on-site emergency response plan and an off-site emergency response plan. The on-site EPRP should comprise actions to be taken in the event of fire, leakage, and poisoning. If the magnitude of the accident is such that cannot be controlled within the site, an off-site emergency plan must be triggered. The EPRP must also consider accidents that may occur during transportation to the port export and also from the port of unloading to the destruction facility.

8. Health surveillance

Before works start the Contractor will provide evidence of recent medical examinations to show fitness for work and to show evidence of routine health surveillance including blood checks.

9. Training

a) National Staff

The Contractor shall ensure adequate training of staff prior to commencement of the works. The GEF ISLANDS Pacific Project, Project Management Unit (PMU)reserves the right to test the qualifications of the personnel prior to commencement of the works. Training should include the following elements:

- Working procedures to be used
- Site zoning
- Site rules
- PPE required for each zone
- Correct use of PPE
- Emergency procedures

This training should also include training of the machine drivers involved with the work. All records of training are to be kept in the HSE file.

b) Vehicle Driver Training and training records to include:
- driver/operator license and training record;
- driver/operator training/briefing notes;

6. Supervision

The PMU or its contractor(s) will monitor the adequacy and progress of the repackaging, loading, stowage, haulage and disposal work and associated activities. The Contractor will ensure that the PMUs' representatives have full and free access to all sites, activities, equipment, materials, papers, information, records, staff, etc. in order to fully perform the monitoring activities.

The PMU's representative will liaise closely with (the representatives of) the Contractor to develop an agreed schedule of works on signature of the contract. The PMU's representative will have the power of veto over any proposed equipment, activity or action that he or she regards as being unsafe, unfit, substandard or unacceptable for the purpose of stowage, transport and shipment overland or on seas or if the materials or actions concerned might not conform to the UN requirements of packaging of toxic waste. The final responsibility for compliance will remain with the Contractor.

The Contractor is reminded that if at any time the PMUs representative is not satisfied that International Standards are being met or not complied with, neglected, compromised or that the Contractor has deviated from the proposed, agreed/accepted procedures of work as detailed in the Contractor's bid proposal, he or she will be entitled to halt all works. Any and all consequential financial loss will be the sole responsibility of the Contractor.

7. REPORTING

7.1 Daily Reporting

The Bidder shall be prepared to establish daily reporting of their works activities. The daily reporting shall comprise:

- Establishing and maintaining a Registry of all personnel and visitors to the site (at Entrance gate)
- Establishing and maintaining a Logbook of repackaging, collection, transportation and disposal activities, and of all incidents and accidents at the site and the response given.

Both Registry and Logbook shall be available for the GEF ISLANDS Project Manager at all times.

7.2 Weekly Reporting

The Bidder shall prepare a weekly report summarising the entries in the above-mentioned daily reports. The weekly reports shall furthermore include a plan for the coming week's activities and any special work procedures shall be highlighted.

The Weekly reports shall be submitted to the GEFIS Project Manager every Monday before 12.00 am Samoa time.

7.3 Final Report

The selected bidder will be expected to provide a full documentary and photographic report of the Services on completion of the Project together with a file in electronic format of all photographs, records and other relevant documents produced and acquired by the Bidder during the Project. The Completion Report will also contain all disposal certificates of the licensed disposal facility in accordance with regulations of the receiving country, or equivalent, for the final disposal of the waste.

The report will be subject to acceptance and final approval by the Project Manager

8. Project duration

The project is expected to commence around **December 2024** and should be completed within a maximum timeframe of **three (3) months**. The following key milestones will guide the project implementation:

1. **Project Inception and Mobilisation** (December 2024, 1-2 weeks):
    - This phase includes initial mobilization, site assessments, and the establishment of logistical arrangements. Contractors are expected to begin preparations for on-site work, including securing necessary permits, and setting up operational bases for repackaging, loading, and transportation.
2. **On-Site Operations** (January to February 2025, 8 weeks):
    - During this period, the contractor will carry out repackaging, labelling, and securing of DDT and PCB waste in compliance with the required international standards and protocols.
    - PCB testing should also be completed during this period, including repackaging and disposal for PCB-contaminated oils if necessary.
3. **Finalization and Reporting** (March 2025, 2-4 weeks):
    - This phase will include the transportation of all hazardous wastes to the port for international disposal, and the submission of final reports and waste disposal certificates.

- The contractor must provide a comprehensive final report that includes details of activities, inventory updates, photographs, and evidence of waste disposal.

Given the urgency to handle and dispose of hazardous materials, the contractor must adhere strictly to the project timeline to ensure that all works are completed by **March 2025**. Any delays must be immediately communicated to SPREP along with mitigation measures to keep the project on track.