

CLARIFICATION QUESTIONS

RFT: GEFIS_2024/004

File: AP_6/5/9

Date: 04 November 2024

To: Interested Service Providers

Contact: Maraea S. Pogi (maraeap@sprep.org)

Subject: [UPDATED] Repackaging, loading, stowage and international disposal of Dichlorodi-phenyl-trichloroethane (DDT) and Polychlorinated biphenyls (PCB) waste from Papua New Guinea

Question 1:

Sampling and the results of testing the stored oils at the PNG Power Moitaka Power Station will significantly impact the project timeline and the mobilization of equipment, staff, and packaging. To provide a customized financial proposal and an accurate timeline, I would like to know if you have considered conducting the testing before and outside the tender requirements;

Response

The RFT specifies that testing of PCB oils will be conducted as part of the tender requirements (see Section 5.4.3). It will not be conducted outside of the tender process. However, bidders are welcome to propose methodologies and timelines for sampling, testing, and subsequent phases of the project in their technical proposals. If the bidder feels this impacts their proposed timeline, they can suggest risk mitigation strategies.

Question 2:

All profiles must be fluent in Tok Pisin. Given that this requirement may restrict the involvement of international experts, would it be feasible to consider employing local interpreters or local personnel fluent in Tok Pisin?

Response

The requirement for fluency in Tok Pisin is meant to facilitate better communication with local stake-holders. We do not envisage any language challenges given CEPA, PNG Power and National Department of Health staff who will be involved in the tender are all fluent in English and Tok Pisin. However, we are open to the possibility of using local interpreters or local personnel who are fluent in Tok Pisin to assist international experts. This approach can be reflected in the bidder's staffing plan.

Question 3:

In paragraph 2, "Introduction to project," it is unclear who will be responsible for updating the PCB inventory. Could you please provide clarification on this matter?

Response



The responsibility for updating the PCB inventory lies with the contractor (see Section 5.8.1). The contractor is required to update and maintain a detailed record of all repackaged items throughout the project, including those related to PCB-contaminated oils.

Question 4:

Could you also provide photographs of the boxes containing DDT following the repacking operations conducted in 2019?

Response

We do not have photographs of the repacked boxes from the 2019 operations immediately available. The DDT was repackaged in 50kg sacks in 2019. However, the contractor will be able to inspect the current conditions of the containers and packaging during site visits after contract award. Any specific needs for visual records should be included in the bidder's proposal.

Question 5:

In paragraph 4.1.2, the quantities of PCB oils are ambiguous. Could you please confirm if my understanding is correct regarding the following quantities: a 400,000 L tank with 200,000 L of oil, three 5,000 L smaller tanks, and one 20,000 L tank, totaling 235,000 L of oil?

Response

Your understanding is partially correct. The quantities of oil are as follows:

- A 400,000-liter tank.
- A 20,000-liter tank.

Three smaller 5,000-liter tanks.

This totals 435,000 liters of oil, with a portion of the 400,000-liter tank estimated to contain 200,000 liters. Please use these figures for your financial and technical proposals.

Question 6:

Should the tanks be cleaned or merely emptied?

Response

The RFT specifies that the tanks should be emptied, not necessarily cleaned (see Section 5.4.2). However, any residual oils remaining after draining should be managed appropriately to prevent environmental contamination.

Question 7:

The Field Supervisor is required to hold an IMDG code certificate. We would like to highlight that IMDG certification is not specified under the IMDG Code, whereas ADR certification is referenced in ADR 1.8.3.7. Would an ADR Advisor certificate be adequate for our purposes?

Response

While the tender specifies that the Field Supervisor must hold an IMDG code certificate, we acknowledge that IMDG certification is not explicitly required under the IMDG Code. An ADR Advisor certificate would be considered adequate for this purpose, as it covers similar competencies necessary for hazardous materials transport, including PCB-contaminated oil.



Question 8:

Could you please confirm whether there are any PCB transformers that require safeguarding?

Response

The scope of the tender does not include the safeguarding of PCB transformers themselves. The focus is solely on the PCB-contaminated oils stored at the Moitaka Power Station, as indicated in the Terms of Reference (TOR).

Question 9:

For the repacking of PCB oils, the ToR only mentions the use of 200 L metal drums. Is there a possibility to utilize alternative packaging such as IBCs or appropriate IMO tanks?

Response

While the use of 200-liter metal drums is specified in the RFT, bidders are welcome to propose alternative packaging, such as IBCs or IMO tanks, provided that these alternatives comply with international hazardous waste transport regulations (Basel Convention and IMDG Code).

Question 10:

Although it is clear that CEPA will act as the notifier, could you clarify who will be designated as the waste producer according to block 9 of the Basel Convention notification document?

Response

CEPA, acting as the notifier, will also designate PNG Power (PCB) and the National Department of Health (DDT) as the waste producers in block 9 of the Basel Convention notification document. Bidders are encouraged to work closely with CEPA to ensure compliance with this process.

Question 11:

Regarding paragraph 8, "Project duration," we would like to stress that a timeframe of three months is unrealistic, considering that transport from PNG to Europe will take at least 45 days and that disposal typically does not occur immediately at incineration facilities. We kindly request that the timeframe be revised to reflect a more realistic duration of at least 7 to 8 months to facilitate the organization and completion of the project.

Response

We acknowledge the concern regarding the timeline. The three-month project duration mentioned in the RFT was an initial estimate based on internal arrangements that we have with partners to have the waste transported to an identified facility in Australia. We understand the challenges involved in such a tender and will consider a timeline of up to 6 months but encourage you to plan for disposal in Australia and not Europe. Bidders should propose their timeline, justifying any deviations based on their methodology and experience.

Question 12:

Please clarify if this stockpiles with the 10 m3 tank is supplementary to the tanks specified in page 10?



The tank capacities noted on page 10 and page 14 of the RFT reference the same storage units. The confusion might stem from the description. To clarify:

■ The primary tanks include a 400,000-liter (400 m³) tank, a 200,000-liter (200 m³) tank, and three smaller 5,000-liter (5 m³) tanks, alongside a 20,000-liter (20 m³) tank, totaling 635 m³. These are the only tanks within the project scope.

Question 13:

What is the total volume of the PCB suspected oil stored in tanks within the scope of the tender? What is the specific gravity estimated in the Tender Docs to convert their volume into the as specified in the financial proposal form?

Response

The total volume of suspected PCB oil is 635 m³. The specific gravity of the oil is estimated at 0.92 for calculation purposes, which should be used to convert the volume to tons for the financial proposal.

Question 14:

Are there any chemical analysis that have already been conducted in any of the tanks certifying already PCB contamination? If yes, should the quantities that are already PCB contaminated be retested?

Response

No recent chemical analysis has been conducted on the oils stored at the Moitaka Power Station. All quantities are considered suspected PCB contamination, and the contractor is required to conduct testing as part of the scope of work. If the contractor finds PCB contamination levels over 50 ppm, those quantities must be managed according to the requirements set out in this RFT.

Question 15:

According to the tender documents, the contractor should drain and pack the PCB contaminated oil from the tanks. Please confirm that the cleaning of tanks and future management of metal parts is not part of the ToR and not in the scope of works of the contractor.

Response

The RFT only requires the contractor to drain and package the PCB-contaminated oil from the tanks. The cleaning of tanks and the future management of metal parts is not within the scope of work for this tender.

Question 16:

According to the ToR, the SCUs required for the exportation of the waste under this RFT will be provided by the Project. Kindly clarify whether the project will undertake the maritime transportation (transboundary movement) of the waste under this RFT.



The project will provide SCUs and maritime transportation for the exportation of the waste as outlined in Section 5.11 of the RFT.

Question 17:

Please explain the activity of SCUs provision by the Project and clarify the sentence specified in the RFT "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".

Response

The project is supported by a major partner in the shipping industry who have offered to provide the SCUs. The project is also supported by a development partner country (Australia) who have identified facilities with the capabilities to dispose the wastes. This is why the project will provide information on the route that needs to be taken.

Question 18:

Kindly clarify whether the DDT waste could be exported from another port or bidders are committed to export it from Kokopo only.

Response

While Kokopo is mentioned as the primary port, bidders may propose the use of an alternative port like Port Moresby or Lae in their technical proposals if they can demonstrate that it offers logistical or economic advantages without compromising project compliance and timelines.

Question 19:

What are the dimensions and models of the tanks' valves?

Response

The specific dimensions and models of the tank valves are not available in the RFT. Bidders will need to assess the valves during the site visit as part of the mobilization of the project.

Question 20:

What is the origin of the oil? 100% is from drained transformers or is it a mixture of different oils and machines?

Response

The oil stored in the tanks is primarily drained from transformers. There may be some mixing with oils from other machinery; however, the majority is transformer oil suspected of PCB contamination.

Question 21:

How long has this oil been stored in those tanks?



The oil has been stored in these tanks for over 2 years. They were previously in transformers for over a decade before been drained. Precise records are unavailable, but this timeline should be considered when assessing the potential state of contamination.

Question 22:

What is the total number of transformers from which the oil have been drained and stored in tanks? Will the disposal of transformers, from which the oil was drained be part of future tender?

Response

The exact number of transformers from which oil has been drained is not specified in the RFT. The focus of the current tender is the disposal of the stored oils. Disposal of the transformers themselves is not within the scope of this tender but may be part of future tenders.

Question 23:

Please note that only the activity of licensing of hazardous waste export in accordance to Basel Convention usually necessitates minimum 7-9 months in order all countries provide their consent, therefore the project timetable shall be extended accordingly taking into account also the additional time needed for export/transport/drainage and final treatment.

Response

We acknowledge that obtaining consent for hazardous waste export under the Basel Convention can take 7-9 months. The project timeline will be adjusted to accommodate the licensing, export, and disposal process. Bidders are encouraged to propose realistic timelines based on their experience.

Question 24:

Please clarify if an international bidder that cooperates with subcontracting agreement with a local licensed and registered company in PNG is eligible and adequate for compliance of aforementioned clause or if the successful international bidder shall also establish a new company and register the company in PNG upon contract award.

Response

An international bidder can comply with the local registration requirements by collaborating with a local licensed and registered company in PNG under a subcontracting agreement. It is not necessary for the international bidder to establish a new company or register in PNG upon a contract if they meet this requirement through a local partnership.

DDT Element

Question 25:

Which Papua New Guinea entity will act as Notifier/Exporter of the DDT wastes?

Response



CEPA (Conservation and Environment Protection Authority) will act as the notifier/exporter for the DDT waste in accordance with the Basel Convention requirements.

Question 26:

Can CEPA provide local labour for the DDT repacking & export works?

Response

Local labor for DDT repacking and export works will not be provided by CEPA. The contractor is responsible for mobilizing and managing their own workforce. However, CEPA and SPREP may facilitate contacts with local service providers where possible.

Question 27:

Is there safe storage for UN packaging and equipment at Nonga General Hospital.

Response

The storage conditions at Nonga General Hospital are secure for the current DDT waste. However, if additional UN packaging and equipment need to be stored, the contractor will need to assess and manage storage to ensure safety and security, as the site is not contained within a lockable fence.

Question 28:

Can SPREP provide the local contact details for rental of equipment such as fork lift truck.

Response

SPREP can facilitate introductions to local service providers, including those renting forklifts, based on past experience. However, the responsibility for securing rental equipment remains with the contractor.

Question 29:

Can SPREP provide the local contact details for local transport and Freight Forwarding companies?

Response

Similar to equipment rental, SPREP may provide some guidance or introductions to local freight forwarding and transport companies, but the contractor is responsible for managing these relationships.

Question 30:

Confirm that the SPREP will manage the sea freight element of the export of DDT from PNG to a nominated disposal site anywhere in the world?

Response

SPREP will provide SCUs and maritime shipping for the project with its partners.

Question 31:

SPREP is responsible for the empty SCU's. Are the SCU's shippers own or line owned SCU's?



The SCUs provided by the project are line-owned containers.

Question 32:

Once the SCU's have been unloaded at the disposal facility, what is to happen to the empty SCU's?

Response

After the waste is unloaded at the disposal facility, the SCUs will be returned to the shipping line that is partnering with the project. The contractor must ensure this is factored into their transport and logistics plan.

Question 33:

Health surveillance of workers. Is there a medical facility in PNG that can provide fitness to work tests?

Response

There are medical facilities in Papua New Guinea capable of conducting fitness-to-work tests. The contractor will need to liaise with these facilities to ensure workers are properly assessed before starting any work on the project.

Question 34:

Health surveillance, what blood tests are required? Can they be obtained in PNG?

Response

Standard blood tests for workers exposed to hazardous chemicals, including liver function and exposure to toxic substances, can be conducted in Papua New Guinea. The contractor will need to organize these tests through local health services, as required by the HSE plan.

PCB Element

Question 35:

How does SPREP envisage the timing to work if all 1025 tonnes of oil is PCB contaminated.

Response

If all 1025 tonnes of oil are found to be contaminated, the timeline will be needed to account for the extended scope. The contractor is expected to propose a detailed timeline that accommodates testing, repackaging, transport, and disposal of the PCB-contaminated oil.

Question 36:

Which Papua New Guinea entity will act as Notifier/Exporter of the PCB wastes? Would this be PNG Power?



CEPA will act as the notifier/exporter for PCB waste. PNG Power may be involved as the waste producer, but CEPA will handle the formal notification process under the Basel Convention.

Question 37:

Can PNG Power provide local labour and fork lift truck for the PCB repacking & export works at the Moitaka Station?

Response

PNG Power is not expected to provide local labor or equipment for the PCB repacking and export works. The contractor should make provisions for the labor and equipment needed for repacking and transportation.

Question 38:

Is there safe storage for UN packaging and equipment at PNG Power Moitaka Station?

Response

There is adequate space for storing UN packaging and equipment at the Moitaka Power Station. However, the contractor will need to assess and manage these storage conditions.

Question 39:

Tank access, please confirm for each tank how access can be made to take PCB samples.

Response

Access to each tank is possible via the Gerehu to 9 Mile Road, and sampling can be conducted via existing valves or other appropriate access points. Specific details about access methods will need to be coordinated with PNG Power on-site during the preliminary site assessment.

Question 40:

Can PNG power provide equipment at the site for draining pumping works if required? Example, scaffolding, pumping equipment etc.

Response

PNG Power does not provide scaffolding or pumping equipment for the works. The contractor is responsible for supplying all necessary equipment for draining and repackaging PCB-contaminated oils.

Question 41:

Confirm that the SPREP will manage the sea freight element of the export of all 1025 tonnes of PCB contaminated oil from PNG to a nominated disposal site anywhere in the world.

Response

Similar to the DDT element, SPREP will provide SCUs and maritime shipping through its partners.

Question 42:



SPREP is responsible for the empty SCU's. Are the SCU's shippers own or line owned SCU's?

Response

As with the DDT component, the SCUs provided are line-owned. The contractor must manage the logistics to return the empty SCUs.

Question 43:

Once the SCU's have been unloaded at the disposal facility, what is to happen to the empty SCU's?

Response

The empty SCUs will be returned to the shipping line that is partnering with the project. The contractor should manage this process as part of their logistics plan.

Question 44:

Health surveillance of workers. Is there a medical facility in PNG that can provide fitness to work tests?

Response

Fitness-to-work tests can be conducted at PNG medical facilities. The contractor should arrange for these tests before any work begins.

Question 45:

Health surveillance, what blood tests are required? Can they be obtained in PNG?

Response

The necessary blood tests, particularly those related to chemical exposure, can be conducted locally. The contractor should ensure that tests for toxic substance exposure are included in the health surveillance program.

Question 46:

Due to the complexity of the Tender an extension of 3 weeks is required. Please confirm.

Response

We have considered a 2 week extension to the 20 November 2024.

Question 47:

Confirm that tenders can be submitted electronically via email.

Response

Yes, tenders can be submitted electronically via tenders@sprep.org as specified in the RFT.

Question 48:

Do technical and financial offers have to be submitted on separate emails?

Response



This is up to the bidders to decide – they can be sent together as separate documents.

Question 49:

Milestone payments on the projects / 60 percent up front?** Given the large costs involved in the project, especially for Moitaka Transformer Oil export, should it be contaminated with PCB, can we invoice based on various project milestones that will allow us to recover project costs? For example,

- ✓ Milestone 1: Upon delivery of ISO tanks and 20ft containers to project site (evidence delivery dockets),
- ✓ Milestone 2: Loading of Waste onto Export Vessel (evidence Bill of Lading), and
- ✓ Milestone 3: Disposal of waste overseas (evidence Disposal Certificate).

Response:

The proposed milestone payment schedule is ok in principle, but subject to negotiation and final approval during contract negotiations with the successful bidder.

We encourage bidders to propose a milestone payment schedule in their financial proposals. However, SPREP does not guarantee upfront payments and will review all payment schedules during contract negotiations.

Question 50:

Testing of PCB (parameter): Correct me if I am wrong, but would you like the disposal costs for respective PCB concentrations above 20ppm, above 50ppm, and above 100ppm shown in the proposal? Note that the higher the concentration of PCB, the higher the disposal rate. Also, should both the PCB Sampling & Testing proposal and disposal proposal be submitted together?

Response:

Yes, it would be helpful to include disposal costs based on different concentrations of PCB contamination (e.g., above 20 ppm, above 50 ppm, and above 100 ppm). This approach allows SPREP to anticipate costs based on the severity of contamination.

Both the PCB Sampling & Testing proposal and the Disposal Proposal should be submitted together as part of your technical and financial proposal, so the entire scope of work is considered holistically.

Question 51:

Procurement of UN Containers: Did you mean specific UN-rated packaging for Transformer Oil (PCB) contaminated and DDT?

Response:

Yes, the RFT refers to the procurement of UN-rated packaging for both PCB-contaminated transformer oil and DDT waste. The containers must meet UN specifications for hazardous waste transport to ensure safety and compliance with international regulations (Basel/Waigani Conventions and IMDG Code).

Question 52:



Extension on the project (if not archived in 3 months). Is there any possibility of the project being extended? The current timeframe seems unrealistic as experience shows that export permits take 60 to 90 days to obtain. Can the waste be moved to TWM Roku IWMF and stored in the interim?

Response:

The possibility of extending the project timeline does exist if the necessary processes (such as export permits) take longer than anticipated. The current 3-month timeline is an estimate and can be adjusted based on the realities of the project.

Interim storage at TWM's Roku Integrated Waste Management Facility (IWMF) can be considered, provided that all necessary safety and regulatory approvals are in place. Bidders should propose such solutions in their project execution plan if delays are anticipated.

Question 53:

Australia (main disposal): Apart from Europe, are the Australian disposal facilities capable of appropriately disposing of PCB and DDT waste, as per RFT? Can this disposal destination still be considered less complex when considering the transboundary movement of this waste stream, involving only three ports: PNG, Solomon Islands, and Australia?

Response:

Yes, Australia is capable of appropriately disposing of PCB and DDT waste and may be a less complex option compared to Europe, especially when considering the transboundary movement process. It is our preferred final disposal destination for this tender.

Question 54:

Kindly provide dimensions of the tanks where oil is currently stored and are included in the present RFP.

Response:

The RFP does not provide exact dimensions for the tanks where the oil is currently stored at Moitaka Power Station. However, the storage units include:

A 400,000-liter tank, a 200,000-liter tank, three smaller 5,000-liter tanks, and a 20,000-liter tank.

Bidders are expected to perform an on-site assessment to gather any additional specific details about the tanks for planning purposes

Question 55:

Kindly confirm that a designated storage area will be provided to the PNG Moitaka Power station where the packed PCB waste will be temporarily stored until their exportation.

Response:



Yes, a designated storage area will be provided at PNG Moitaka Power Station where the packed PCB waste can be temporarily stored until exportation. The contractor will be responsible for ensuring the security and safe handling of the stored waste during this period.

Question 56:

Since the relevant responses to the clarifications shall be dispatched within the following days, we hereby are kindly asking for two-weeks' time extension in order to provide bidders sufficient time for review of the additional information and prepare a holistic and competitive proposal.

Response:

The due date has been extended to the 20 November 2024.

Question 57:

Can the Tender allow us as potential bidders to propose the use of either ISO Tanks or IBCs? And,

Response:

Your interpretation of using 200L metal drums is correct based on the current specifications. However, given the concerns raised regarding the large number of drums required (3,000 drums) and the associated risks, **bidders are welcome to propose the use of 20,000L ISO Tanks or 1,000L IBCs** as alternatives for repacking the PCB oils.

Question 58:

In doing so allows us to price the use of the above items accordingly in the Tender.

Response:

If you choose to propose ISO Tanks or IBCs, please provide the rationale for this choice, including safety, environmental, and regulatory benefits, and price these items accordingly in your tender submission. SPREP will consider these alternatives as long as they meet international hazardous waste transport regulations (Basel/Waigani Conventions and IMDG Code).

ADDITIONAL QUESTIONS (Extended clarification period)

Question 59:

With regards to your previous responses stating that "The project will provide SCUs and maritime transportation for the exportation of the waste as outlined in Section 5.11 of the RFT.", kindly clarify if the financial proposal by the bidder shall include aforementioned maritime transport or not?

Response:

Maritime transportation costs are not required to be included in the bidder's financial proposal, as the project will provide SCUs and manage the maritime transport costs as outlined in Section 5.11 of the RFT. The bidder should therefore focus on costs related to site operations, handling, packaging, and inland logistics up to the export point in PNG.



Question 60:

If maritime transportation cost is provided by the Project and bidders shall not include maritime transport cost in their financial proposal, what is the bidder's obligation that foresees to offer sustainable destruction in EU licensed facility? To provide project authority with port of arrival at the country of destination only?

Response:

Since the maritime transport cost is covered by the project, bidders are responsible for ensuring the waste arrives at the identified disposal facility. Bidders should provide information on the proposed port of arrival and coordinate to meet international hazardous waste management regulations, confirming the final facility's compliance with EU standards for sustainable disposal.

Question 61:

If bidders shall include maritime cost in their proposals, please name the shipping line that project stakeholders have made the pre-arrangement, so bidders request cost quotation also for them.

Response:

The project has a pre-arrangement with Swire Shipping to handle the maritime transport for the waste. Therefore, bidders do not need to secure cost quotations from other shipping lines or include maritime transport costs in their financial proposals. Swire Shipping will manage this component, allowing bidders to focus on site operations, packaging, and inland logistics up to the export point in PNG.

Question 62:

Kindly confirm that in the case that bidders shall include maritime cost, they can offer also other shipping lines solution that accept the PCB waste cargo.

Response:

Refer response above

Question 63:

Apart from the "maritime cost" from the shipping line there are additional relevant cost e.g. custom clearance/port fees etc regardless the place of destination. Also, there is inland cost at the port of destination up to the treatment facility. Kindly confirm if aforementioned cost shall be included in Bidders' financial proposal.

Response:

Yes, these additional costs, including customs clearance, port fees, and inland transport at the destination, should be included in the bidder's financial proposal. All costs related to



handling, transport, and final disposal of the waste at the facility should be clearly detailed in the financial proposal to ensure comprehensive cost coverage.

Question 64:

In your response in question 11, it is stated "the three-month project duration mentioned in the RFT was an initial estimate based on internal arrangements that we have with partners to have the <u>waste transported to an identified facility in Australia</u>". Does aforementioned means that also the treatment cost of PCB /DDT shall not be included in the financial proposal by the bidders? If the treatment cost shall be included in the financial proposal, please name the identified facility in Australia that based on internal agreements can treat the waste.

Response:

The treatment cost should be included in the bidder's financial proposal. The project's preferred facilities in Australia are Cleanaway Narangba Liquid Waste Services in Queensland for DDT and Cooper's Environmental Waste Recycling Pty Ltd in North St Marys for PCB. These facilities have been suggested by project partners, and discussions are ongoing to confirm their involvement. Bidders should use these facilities as the basis for their cost estimates, detailing treatment and disposal expenses in their financial proposal

Question 65:

Proper sampling of the oil in the tanks in compliance to international standards necessitate the sampling from upper Hight of the tank due to the high possibility the oily waste have formed different physical phases (e.g. water phase, sediment phase) with different levels of pollutions. Please clarify if there are manholes or other openings in the tanks where bidder can use specialized equipment (e.g. Coliwasa Samplers) to take samples apart from the lower valve.

Response:

Sampling from various points within the tanks, especially the upper sections, is essential due to potential phase separation. The tanks at Moitaka Power Station have existing manholes and access points that allow for the use of specialized equipment, such as Coliwasa samplers, to collect representative samples. Bidders should confirm the specifics of these access points during the initial site assessment.

Question 66:

Based on your response the estimated total volume of potentially contaminated PCB oil amounts to 635 M3 and the specific gravity utilized was 0,92. Based on aforementioned assumptions, pls clarify why the quantity in the financial proposal in tonnage is 1025 metric tonnes



The estimated volume of 635 m³ was converted to tonnage using a specific gravity of 0.92, which would amount to approximately 584 metric tonnes. The 1025 metric tonnes in the financial proposal form likely accounts for additional quantities or buffers for operational contingencies. Bidders are encouraged to use the specific 635 m³ estimate with the 0.92 specific gravity in calculations and to clarify any anticipated variations in their proposals if they feel a buffer is necessary.

Question 67:

Kindly let us know the exact procedure to conduct a site visit before the submission of offers (date, time, contact person, etc), in order to better evaluate the site and all the proposal's factors.

Response:

Contact details of PNG Power personnel responsible for the oils to arrange a site visit:

Ellie Paon

Environment Coordinator – HSEW

PNG Power Limited

Cnr Wards Road & Cordia St, PO Box 1105, Boroko, NCD, 111, Papua New Guinea

Tel: 675 324 3536 | Mob: +675 7036 0427

Email: EPaon@pngpower.com.pg

Question 68:

Regarding disposal technologies in Australia, after investigation there are only two processes/technologies that may be suitable to treat the POPs from PNG.

Can you please advise on this matter and SPREP understanding of correct disposal in Australia so that all bidders have a clear picture. The previous question and answer number 53 is not specific enough to assess the disposal options in Australia.

Response:

- DDT high temperature incineration or plasma arc technology
- PCB methods like high-temperature incineration or chemical dechlorination to effectively break down PCBs, adhering to strict environmental standards.
 - o It's important to note that the use of cement kilns for PCB disposal is generally limited to materials with PCB concentrations below 50 ppm, as higher concentrations may not achieve the necessary destruction efficiency. Therefore, for PCB oils with



concentrations exceeding this threshold, dedicated hazardous waste incineration facilities are preferred.