



SPREP

Secretariat of the Pacific Regional
Environment Programme



10th Pacific Islands Conference

NATURE CONSERVATION AND PROTECTED AREAS

Nature Conservation Action for a Resilient Pacific

AP_6/5/8/3

2 July 2020

Mr Noel Nathan
Acting General Services Manager
Norsup Hospital
Vanuatu
nnathan@vanuatu.gov.vu

Dear Sir,

RE: EU funded repair of Norsup Hospital healthcare waste incinerator

SPREP and the PacWastePlus (PWP) Team has commissioned Advanced Combustion Engineering (ACE), to undertake repairs of the Norsup Hospital healthcare waste incinerator that was originally purchased by the European Union funded PacWaste Project in 2015. Included in the commission is the fabrication and procurement of necessary parts, provision of spare parts of consumable items and personal protective equipment for incinerator operators, and the delivery of training for hospital workers and maintenance staff.

The European Union has requested that prior to any repair works being undertaken, SPREP seek the agreement of the appropriate Ministry to confirm their intent to manage the ongoing operation and maintenance of these important waste management technologies. The incinerators were transferred to Ministry ownership in 2019, and the EU is now seeking confirmation that their investment in healthcare waste management will be sustained after this round of maintenance.

Please find attached a Memorandum of Understanding (MoU) which outlines the requested commitment from your Ministry, and the specific activity SPREP will implement. Once we have received your signed MOU, and international travel is re-instated, we will seek mission clearance to enable the ACE employees to undertake the required maintenance works.

Please do not hesitate to contact Mr. Bradley Nolan (PWP Programme Manager) to discuss either this MOU or the process for undertaking the repairs.

Yours sincerely,

Kosi Latu
Director General

MEMORANDUM OF UNDERSTANDING (MOU)

MEMORANDUM OF UNDERSTANDING (MOU)

between

Ministry of Health Government of Vanuatu

and

The Secretariat of the Pacific Islands Regional Environment Programme (SPREP)

(together the Parties)

Ministry of Health is the Ministry in **Vanuatu** with responsibility for (i) ensuring that the population has equitable access to affordable, quality health care through a fair distribution of health facilities that are suitably resourced and equipped; (ii) Reducing the incidence (and impact) of NCD and communicable diseases; (iii) Improving population health and well-being by promoting healthy life style choices and health seeking behaviour; (iv) Building health sector management capacity and systems to deliver efficient and effective delivery of quality health services aligned with national directives.

SPREP is a regional, intergovernmental organisation comprising 26 members consisting of 21 Pacific Island Countries and Territories and 5 developed countries with direct interests in the Pacific Islands Region. SPREP's mandate is to promote co-operation in the Pacific Islands Region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations.

Whereas

The Parties have mutual interests in relation to the protection of the environment and developing and strengthening systems, institutions, organisations and individuals concerned with environmental protection in Vanuatu as well as the Pacific Islands Region.

The Parties agree as follows:

1. Purpose

This MOU recognises the intent of SPREP and **Vanuatu** to work together on the re-establishment of healthcare waste Management at Norsup Hospital.

The purpose of this MOU is to provide a framework of cooperation between the Parties in the field of waste management in **Vanuatu**.



2. Objectives

The objective of this MOU is to develop a partnership between **Ministry of Health** and SPREP that will, as far as possible, and without limitation:

1. Enhance waste management and pollution control resulting from appropriate healthcare waste management;

3. Collaborative activities

The Parties agree, to the extent possible, to collaborate in those areas identified in Section 2 above, to:

1. Implement joint activities and projects where SPREP has been funded by donors to manage or implement projects;
2. Invite each other to participate in relevant project steering committees, technical advisory panels and other project related meetings;
3. Actively engage and assist the implementation of all donor funded projects which **Ministry of Health** is participating in, providing logistical and jurisdictional support where required;
4. Collect and manage data in accordance with agreed data strategies and standards;
5. Share information and resources that will improve the effectiveness of both Parties and the wider Pacific Islands region;
6. Collaborate on, participate in and support special events at regional and global levels relating to the above;
7. Collaborate to enhance capacity and promote best practice in environmental policies and their implementation in **Vanuatu** and in the Pacific Islands region to ensure international, regional and national environmental objectives and commitments are met;
8. SPREP will undertake repairs on the healthcare waste incinerator located at Norsup Hospital with the understanding that **Ministry of Health** will ensure the ongoing funding for maintenance and operational requirements to keep the healthcare waste incinerator operating efficiently; and
9. Cooperate in such other fields as the Parties may agree to add.

4. Agreements

Specific collaborative work, and especially donor-funded project activities, shall, once agreed, be implemented through service level agreements, letters of agreement or other instruments or modalities as may be agreed by the parties.

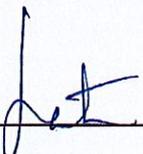
5. Nature of the MOU

- i) This MOU constitutes an expression of shared commitment of the Parties to achieve their shared objectives relating to the protection of the environment and strengthening the capacity of systems, institutions, organisations and individuals concerned with environmental protection in the Pacific region.

- ii) Unless otherwise agreed, each Party's actions under this MOU shall be considered to be that Party's sole and separate action for all purposes, including liability, and neither Party shall claim to be acting on behalf of, or as agent for, the other Party to this MOU.
- iii) This MOU is not governed by international or domestic law and does not constitute, nor is it intended to be a legally binding arrangement, contract or relationship. It does not create any legally binding or enforceable obligations, express or implied. It serves only as a record of each Party's separate intention pending execution of specific agreements governing the undertaking of activities as contemplated by this MOU.
- iv) This MoU constitutes an expression of mutual good faith by the Parties who commit to carrying out their responsibilities to the best of their abilities. Nothing in this MoU shall render either Party liable for any debts or obligations incurred by the other. Neither Party may make representations on behalf of the other.

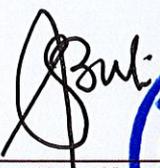
6. Operational Provisions

- i) This MOU shall enter into force on the date the last Party signs.
- ii) This MOU may be amended by agreement in writing between the Parties.
- iii) This MOU shall endure until such time as amended or terminated by the Parties.
- iv) Any dispute, controversy or difference as to the interpretation of this MOU will be settled amicably by mutual consent between the Parties.
- v) Either Party may terminate this MOU by giving three months' written notice to the other.
- vi) Termination of this MOU will not incur liability for either Party and will not affect any separate agreements or other legally binding arrangements in place between the Parties.
- vii) Each Party will name, and keep updated, focal points to co-ordinate the cooperation called for in this MOU and its Annexed projects.



 Kosi Latu
 Director General
 SPREP

Date: 15.7.2020



 Hon. Silas Bule Melje
 Minister of Health



Date: 16.7.2020

Annex 1: PacWastePlus Programme

Programme Background

The European Union funded PacWastePlus programme, is working with 14 countries in the Pacific region and Timor-Leste, to improve and enhance waste management activities and the capacity of governments, industry and communities to manage waste to reduce the impact on human health and the environment.

Programme Objectives

PacWastePlus seeks to generate improved economic, social, health and environmental benefits for Pacific Island Countries arising from stronger regional economic integration and the sustainable management of natural resources and the environment. The programme activities will be designed to assist Countries to ensure the safe and sustainable management of waste with due regard for the conservation of biodiversity, reduction of marine litter, health and well-being of Pacific island communities, and climate change mitigation and adaptation requirements.

Programme Activities

PacWastePlus will work with participating countries, the waste industry and the agencies from the Council of Regional Organisations of the Pacific (CROP) to address three waste streams and eight sub-waste stream types.

- hazardous wastes: asbestos, e-waste, healthcare waste
- solid wastes: recyclables, organic waste, disaster waste, and bulky waste
- related solid wastes found in wastewater.

Programme Deliverables

The programme aims to deliver quality outcomes through four main programme delivery areas:

1. Improved data collection, information sharing, and education and awareness
 - Collate and review existing data on waste and pollution at the regional and national level and identify key areas where further data needs to be collected.
 - Establish an INFORM data portal for waste related data.
 - Establish and implement national waste monitoring programmes for routine data collection and reporting that creates good baselines for measuring performance, as well as creating comprehensive country waste profiles for dissemination in all countries.
 - The development of a model regional education and awareness raising plan to guide national delivery of relevant programmes.
 - Establish a Research Advisory Group (RAG), based on representation inclusive of women and younger researchers, to develop a practical research agenda.
2. Policies and regulatory frameworks developed and implemented
 - Assist in developing:
 - a regional legislative framework with integrated policies and institutional arrangements for waste management
 - national policies, legislation and implementation strategies to transition to a comprehensive and sustainable waste management system
 - developing mechanisms such as national licencing and certification for waste management service providers and pilot in one - three countries.

- Advocate for change at regional and international meetings to influence the decision making of the Pacific and world leaders to support good environmental governance and action.

3. Best practices, including enhanced private sector engagement and infrastructure development, implemented

- Assist countries in:
 - solid waste management through the implementation of prevention and reduction programmes that promote schemes to minimise the waste generated from imported products and nearly expiring perishable products.
 - disaster waste management through preparedness, response, recovery and reconstruction to assist countries in dealing with the generation of large volumes of waste.
 - implementing legislation that enables best practice in waste management, including minimising the waste generated by imported products such as prevention of the import of nearly expiring perishable products; along with guidelines to assist businesses in complying with this legislation.
- Provide support to manage waste and pollution sustainably through the implementation of preferred sustainable financing options such as polluter pays, buy-back schemes, and Container Deposit Legislation for difficult waste streams and collected wastes, and extended producer responsibility programmes for imported goods, where feasible such as imported cars.
- Develop and expand the spatial scope and continue to roll out existing programmes to dispose of legacy and hazardous wastes and remediate contaminated sites such as asbestos, healthcare waste and E-waste.
- Implement feasible resource recovery initiatives with private sector involvement.
- Improve and/or construct appropriate small scale waste management infrastructure to facilitate good practice in waste management.
- Develop and implement agreements and incentives for private sector participation in waste management.
- Support atoll nations export some wastes to regional recycling hubs.
- Implement programmes to assist Pacific Island Countries to build national and local capacities in designing bankable projects that can then be supported through the Pacific Regional Infrastructure Facility (PRIF) and/or Green Climate Fund (GCF).
- Complete selected PacWaste activities related to asbestos management and healthcare waste management.

4. Human Capacity Enhanced

- Undertake a national capacity needs assessment of all countries to identify the current standards being implemented for waste on governance, management and enforcement against required competency levels to prioritise the training requirements of Pacific Island Countries.
- Conduct specialised national and regional capacity building on identified priority areas based on capacity needs assessment.
- Consider mainstreaming waste management into primary and secondary education in suitable countries by using the Regional Environment Centre approach and expanding on the Cleaner Schools Project which has been successfully conducted in a number of countries.
- Affiliate and collaborate with a regional university or other education institution offering waste management courses with competency-based assessments and hands-on modules towards accreditation.
- Promote capacity building exchanges among all SPREP members and Timor-Leste in the public and private sector.

4

Programme Commitment

Vanuatu will:

- a. Assist SPREP's contractors to undertake approved works to repair or undertake approved maintenance activities on the healthcare waste incinerator.
- b. Cover all additional costs related to any non-approved maintenance or repair activities (including relocating the healthcare waste incinerator from its current location)
- c. Ensure on-going recurrent funding is allocated to ensure efficient operation of the healthcare waste incinerator (e.g. funding to purchase fuel etc.)
- d. Ensure on-going recurrent funding necessary to undertake routine maintenance and replacement parts
- e. Ensure hospital staff are trained in the safe use and operation of the healthcare waste incinerator, including new staff as they are employed.

SPREP will undertake the following one-off actions:

Item	Action
Incinerator Installation	<ul style="list-style-type: none">• Visit site and assess the condition of the incineration plant and all available components. Review proposed installation location and present a works action plan report to SPREP detailing technical information in regards to the condition of the incinerator to be installed, services required to be provided by the hospital, a site layout plan, existing slab and building details, proposed installation and commissioning plan and a proposed works schedule.• This visit should also be used to meet with local contractors to assist with the transportation of required components.
Fuel Tank & Oil Burners	<ul style="list-style-type: none">• Supply and Install Replacement 200 Litre diesel fuel tank, complete with fuel level gauge. The tank shall be elevated to a minimum of 800mm above ground level and fabricated from mild steel to suitable international standards for the storage of diesel fuel. The fuel tank and support stand shall be sandblasted and painted using a paint system acceptable for use in a coastal or marine environment.• Supply and Install Replacement Ecoflam Primary & Secondary Chamber diesel Burners in accordance with OEM Specification. Each Burner is to be equipped with a pressure gauge and an inlet fuel filter. If the existing burners are still in a serviceable condition they shall be stripped and components retained on site as additional spares.• Fit Burners with capillary type thermostat/Heat Switches to automatically activate the burner fan when the burner temperature exceeds 60 Degrees Celsius. Modify Control panel wiring to ensure heat switches activate burner fans even when Control Switch is on the OFF position. Supply new wiring between the control panel and the burners if required. Final as built wiring diagrams must be supplied to the hospital and a laminated copy retained in the incinerator control panel.• Supply and install flow and return piping to the primary and secondary burners from the fuel tank. All piping and fittings shall be of rigid copper or stainless steel with flexible lines permitted for use only as an immediate connection to the burner.

Item	Action																	
Replacement of Incinerator Stack	<ul style="list-style-type: none"> Supply and Install Replacement Incinerator stack to a total height of 5.5 metres above ground level. The replacement stack shall be equipped with cooling air entry slots as per the design of the existing incinerator stack. The new stack shall be provided with guy wires and fixed to the incinerator enclosure during installation. The new stack shall also be providing with a cowl to prevent the ingress of water from the roof into the building enclosure 																	
Mild Steel Incinerator Body & Painting	<ul style="list-style-type: none"> All mild steel surfaces are to be cleaned and any corrosion or paint or salt residue removed by either manual or powered wire brushing. Any missing bolts shall be replaced with similar bolts. Apply two coats of inorganic zinc primary followed by two coats of high temperature enamel paint using commercially available aerosols cans. 																	
Incinerator Start-Up & Operation	<ul style="list-style-type: none"> At the conclusion of installation of all new components and prior to the incineration of any waste materials the incinerator refractory must be dried out in accordance with the original refractory curing procedure as specified by the incinerator manufacturer. Documented proof of the completion of the curing procedure in the form of a manual temperature log and timed and dated photographs of the system temperature controller must be available for review if requested by SPREP. At the conclusion of the refractory curing process waste incineration operations can commence. A minimum of two trial burns over two separate days must be performed. As the conclusion of this process the maximum batch size, burn time and combustion air settings must be confirmed and documented in an as commissioned data sheet which is to be provided to the hospital and SPREP for future reference. 																	
Incinerator Theory and Operational Training	<ul style="list-style-type: none"> A minimum of 3 OFF informal training sessions for a duration of not less than 30 Minutes duration shall be performed for the incinerator operational staff. The first session shall be performed at the conclusion of plant installation either after or during the refractory curing procedure. Two more training sessions shall be performed on two separate days simultaneously with the incinerator start up trial burns. Training shall address the theory of operation of the incineration plant, identification and maintenance of all incineration plant components and operation of the incineration plant in an effective and environmentally sound manner. 																	
Provision of spare parts	<table border="1"> <thead> <tr> <th>Parts</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Primary & Secondary Burner Parts</td> <td>Oil Nozzle</td> <td>2 sets per burner</td> </tr> <tr> <td>Oil Valve, Oil Pump & Coupling</td> <td>1 set per burner</td> </tr> <tr> <td>Diffuser, Blast Tube & Ignition Electrodes</td> <td>1 set per burner</td> </tr> <tr> <td>Burner Motor, Capacitor & Fan Impellar</td> <td>1 set per burner</td> </tr> <tr> <td rowspan="2">Common Burner Parts</td> <td>Burner Controller</td> <td>1 off</td> </tr> <tr> <td>Flame Sensor</td> <td>4 off</td> </tr> </tbody> </table>	Parts	Description	Quantity	Primary & Secondary Burner Parts	Oil Nozzle	2 sets per burner	Oil Valve, Oil Pump & Coupling	1 set per burner	Diffuser, Blast Tube & Ignition Electrodes	1 set per burner	Burner Motor, Capacitor & Fan Impellar	1 set per burner	Common Burner Parts	Burner Controller	1 off	Flame Sensor	4 off
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Door Sealing Ceramic Rope	-	1 set		
Provision of Personal Protective Equipment	<ul style="list-style-type: none"> • 3 sets of Leather Gloves & Full-face shields 			

