

TERMS OF REFERENCE

Individual Contractor

1. Assignment Information

Assignment Title:	International Consultant to support the implementation of Medical Waste Management with focus on the Waste Water Management at the target health facilities
Cluster/Project:	Learning from China's Experience to Improve the Ability of Response to COVID-19 in Asia and the Pacific Region (Medical Waste Management)
Post Level:	Specialist
Contract Type:	Individual Contractor (IC)
Duty Station:	Homebased
Expected Place of Travel:	N/A
Contract Duration:	25 days (06 September – 10 November 2021)

2. Project Description

Since 27 January 2020 when Cambodia confirmed the first case of COVID-19, the Royal Government of Cambodia (RGC) has implemented numerous measures to prevent its possible spread with technical support from the World Health Organization (WHO). As of 27th July 2021, Cambodia has a total of 75,152 confirmed cases of COVID-19, and 1139 death.

The Cambodian Ministry of Health (MoH) has played a central role in overseeing and containing the response to COVID-19 and providing medical advice and training to hospitals and health workers. The MoH has authorized three hospitals in Phnom Penh and 25 Provincial Referral Hospitals to order tests for and treat cases of COVID-19.

Governmental efforts with extensive aid support from China and other countries have significantly improved the country's overall capacity to handle the COVID 19 pandemic. However, proper and safe treatment of medical waste infected by COVID-19, areas in which Cambodia has limited resources, expertise, and experience are one of the remaining, critical challenges. Particular challenges which the COVID response designated hospitals experience include:

- Lack of a full set of equipment and operational guidelines for a full treatment of infectious waste (solid waste)
- Lack of equipment and guidelines for treating wastewater
- Lack of guidelines to ensure proper operation of incinerators to minimize health and environmental hazards
- An insufficient amount of Personal Protective Equipment (PPEs).
- The prevalent mix of waste types, which heighten the risk of infections among waste collectors

This project aims to overcome these challenges and to support the RGC to strengthen its ongoing efforts to manage infectious medical waste and protect Phnom Penh's population and the urban environment against the threat of COVID-19. Within the twelve months timeline, the project aims to achieve the following three outputs.

- 1) The increasing volume of medical waste and wastewater in the three hospitals in Phnom Penh working with COVID-19 patients, as well as in the city's communities properly managed

- 2) The technical capacities of health care workers and service providers to treat solid waste and wastewater developed and strengthened
- 3) Project results and best practices on medical waste management timely and widely disseminated

UNDP will work closely with the WHO and MoH as well as the target three hospitals namely National Pediatric Hospital (NPH), Khmer-Soviet Friendship Hospital (KSFH) and Chak Angker Health Center for the successful implementation of the project.

3. Detail Scope of Work

UNDP Cambodia is looking for an International Expert/Specialist to deliver the following tasks.

Task 1: To assess the current practices of wastewater management of the three target health facilities in Phnom Penh.

- Conduct desk review of relevant documents including national and international guidelines in wastewater management in the healthcare setting.
- Develop the assessment protocol and data collection tools for site assessment of the three target health facilities in Phnom Penh to understand the current practices in managing wastewater.
- Guide the National Consultant (to be recruited by UNDP Cambodia) to carry out on-site assessment - the physical field work at the health facilities (based on the developed assessment protocol and data collection tools mentioned above)
- Lead virtual consultations with relevant stakeholders in collaboration with National Consultant as needed.
- Based on the collected data, proceed with data analysis to determine the needs of water waste treatment of each target health facility, and provide technical specifications of the equipment for water waste treatment.
- Produce an assessment report with concrete recommendations for each target health facility for water waste management in their respective healthcare facility.
- Validate the findings and recommendations with the target health facilities and seek further comment and feedback from MoH and other relevant stakeholders.
- Finalize the assessment report, taking into account concerns, comments, and suggestions raised by stakeholders.

Task 2: Produce the water waste management plan including technical specification of the equipment for water waste treatment for the three targeted healthcare facilities.

- Develop a water waste management plan for each healthcare facility based on the findings from the site assessment and conduct consultations with target healthcare facilities to assess the feasibility of the implementation of water waste management plan.
- Make further adjustment to the plan following comments/suggestions from the healthcare facilities.
- Develop the technical specification including estimated costs of the water waste treatment equipment following WHO's standard or other recognized standards for UNDP's consideration of procurement.
- Validate the specification with target healthcare facilities, MoH, WHO and other relevant stakeholders to ensure the proposed equipment is technically qualified.

4. Expected Outputs and Deliverables

The outputs and specific deliverables in sequence, corresponding to the work and their corresponding target delivery dates are presented in the table below.

N	Deliverables/Outputs	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required
1	Output 1: Completion of desk review and development of assessment protocol and data collection tools	5 days	10 th September 2021	Project Coordinator, Program analyst, and ARR-P
2	Output 2: Completion of data analysis and first draft assessment report presented to UNDP, MoH, targeted healthcare facilities and other key stakeholders.	10 days	30 th September 2021	
3	Output 3: Finalize assessment report with reflection of comments obtained from UNDP, MoH, targeted healthcare facilities, and relevant stakeholders.	3 days	7 th October 2021	
4	Output 4: Draft water waste management plan, including technical specification of water waste treatment submitted and presented to UNDP, MoH and target healthcare facilities.	5 days	20 th October 2021	
5	Output 5: Finalize the water waste management plan, including technical specification of water waste treatment equipment with reflection of comments obtained from UNDP, MoH, targeted healthcare facilities, and relevant stakeholders.	2 days	28 th October 2021	
Total # of Days:		25 days		

5. Institutional Arrangement

The Consultant will be under direct supervision by the Project Coordinator. The deliverables will be reviewed by the Project Coordinator and Programme Analyst and subsequently approved for payment release by the Head of Programme Unit of UNDP based on confirmation of satisfactory outputs from the reviewers.

6. Duration of the Work

The timeframe is for 25 working days spreading over the period between 06 September – 10 November 2021. A more detailed work plan of the assignment will be further elaborated by the selected consultant and in collaboration with UNDP focal team mentioned above.

7. Duty Station

It is a home-based assignment; the selected consultant can complete the tasks from a distance in collaboration with national consultant and UNDP Cambodia focal person.

8. Minimum Qualifications of the Individual Contractor

Education:	Master's degree (or equivalent) in environment, public health, environmental health, waste management, or other relevant fields.
Experience:	<ul style="list-style-type: none"> • Minimum 5 years of relevant experiences in designing and conducting research or assessment in areas related to waste management; • Demonstrate strong knowledge of solid and water waste management; knowledge of waste management in healthcare facilities is a plus; • Familiarity with healthcare system in Cambodia or Asia is preferred; • Experience in working with government institutions particularly health facilities is an asset;
Competencies:	<ul style="list-style-type: none"> • Excellent communication skills (spoken, written, and presentational); • Independent and initiative working; • Good report writing skills;
Language Requirement:	Fluency in English (spoken and written)

9. Criteria for Evaluation of Level of Technical Compliance of Individual Contractor

Technical Evaluation Criteria	Obtainable Score
Master's degree (or equivalent) in environment, public health, environmental health, waste management, or other relevant fields.	20
Minimum 5 years of relevant experiences in designing and conducting research or assessment in areas related to waste management.	30
Demonstrate strong knowledge of solid waste/water waste management system.; knowledge of waste management in healthcare facilities is a plus.	20
Familiarity with healthcare system in Cambodia or Asia is preferred.	20
Experience in working with government institutions particularly with health facilities is an asset.	10
Total Obtainable Score:	100

10. Payment Milestones

The consultant will be paid on a lump sum basis under the following installments.

N	Outputs/Deliveries	Payment Schedule	Payment Amount
1	Upon satisfactory completion of output #1	10 th September 2021	30%
2	Upon satisfactory completion of output #2 and #3	7 th October 2021	30%
3	Upon satisfactory completion of output #4 and #5	28 th October 2021	40%