



TERMS OF REFERENCE

1. General Information

Position Title:	Life Cycle Analysis Expert
Unit:	Policy Development and Research Unit
Contract period:	6 months
Project:	Reduction of Unintentionally Produced Persistent Organic Pollutants and Mercury through an Environmentally-Sound Approach on Healthcare Wastes Management in the Philippines with a Special Focus on the Pandemic
Reporting to:	Project Manager
Duty Station:	Quezon City
Employment status:	Project-term employee (output-based)

II. Background

Organizational Context

The project is funded by the Global Environment Facility (GEF) and is being implemented by the United Nations Industrial Development Organization (UNIDO) with the Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB) as lead agency and BAN Toxics as executing entity.

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The Directorate of Technical Cooperation and Sustainable Industrial Development (TCS), headed by a Managing Director, ensures the Organization's application of strategies and interventions for sustainable industrial development related to environment, energy, Micro, Small and Medium-Enterprises (MSMEs), and digitalization. The Directorate of Technical Cooperation and Sustainable Industrial Development (TCS), and in close coordination with other organizational entities within UNIDO, the Division of Circular Economy and Green Industry (TCS/CEG) contributes to greener and more circular industries and products by minimizing both resource use along value chains and the emission of pollutants to the environment. The Responsible Materials and Chemicals Management Unit (TCS/CEG/RMC) is responsible for supporting Member States to implement the chemicals and wastes obligations and requirements under the Basel, Minamata, Rotterdam, and Stockholm Conventions and other emerging relevant agreements, in particular where it relates to larger and formalized industries and sectors, and to leverage its experience to address industrial pollution mitigation in general as well as other emerging compliance mechanisms

DENR-EMB is a national authority responsible for pollution prevention and control, and environmental impact assessment. EMB is guided by the vision of a nation empowered to protect its finite natural resources in pursuit of sustainable development, to ensure a healthy environment that enhances the Filipino quality of life for present and future generations. Its mission is to restore, protect, and enhance environmental quality towards good public health, environmental integrity, and economic viability.

Particularly, EMB is mandated to implement the following national environmental laws: Presidential Decree 1586 (Environmental Impact Statement System), Republic Act 6969 (Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990), Republic Act 8749 (Clean Air Act of 1999), Republic Act 9003 (Ecological Solid Waste Management Act of 2000), Republic Act 9275 (Philippine Clean Water Act of 2004), and Republic Act 9512 (Environmental Awareness and Education Act of 2008).

BAN Toxics is an independent non-government environmental organization that works for the advancement of environmental justice, health, and sustainable development in the area of chemicals and wastes with a special focus on women, children, and other marginalized sectors.

BAN Toxics' intervention approach emphasizes how the mismanagement of toxic chemicals can impact us. Chemicals are a part of daily life and they play an important role in society. However, their mismanagement can potentially impact various aspects of human life. As such, the organization views toxic chemicals issues as important human rights issues.

PROJECT CONTEXT

Reduction of unintentionally produced persistent organic pollutants (uPOPs) and Mercury through an environmentally-sound approach on health care wastes management” or the HCW project.

This project aims to achieve the protection of human health and the environment from the impacts of improper medical wastes management. It also focuses on the avoidance and reduction of the releases of unintentionally produced persistent organic pollutants (POPs) and mercury in the health care waste sector. Below are the major components of the project:

- Component 1: Unintentionally produced POPs release reduction in the healthcare waste sector*
- Component 2: Management of mercury, mercury-added products (MAPs) and mercury wastes in the health sector according to the Minamata Convention on Mercury and the Philippine National Action Plan for MAPs phase-out.*
- Component 3: Capacity-building, awareness raising, and knowledge management*
- Component 4: Monitoring and Evaluation*

The project is going to be implemented in three major sites in the country covering hospitals, health care facilities, and various communities in Region 2, Region 8, and the National Capital Region.

III. Scope of Work

In relation to Output 1.1.3: “Assessment of the lifecycle impact of PPEs and protective measures (taking into consideration the consumption of material and generation of POPs containing wastes),” the consultant’s specific roles include:

- In coordination with the Policy Development and Research Unit of BAN Toxics, spearhead the selection of a suitable LCA software and associated database compliant with ISO or equivalent standards based on knowledge exchange and consultation with LCA experts
- Conduct a life-cycle analysis study covering at least 3 types of PPEs with at least 2 manufacturing alternatives in compliance with the objective of waste reduction and reduction of uPOPs generation, in coordination with the technical consultant working with PPE manufacturers.
- Provide recommendations (including policy) on the improvement of the PPE manufacturing value chain to minimize waste generation, the use of toxic materials, and to improve access for users.

Project outputs will be developed under the supervision of the Project Technical Working Group, the Department of Health, and the DENR-EMB, the UNIDO and with support from BAN Toxics.

IV. Qualifications

- A degree in social sciences, economics, or related studies
- A demonstrated expertise in the use of LCA software and study methodologies
- At least 5 years of experience working in the development sector
- Based locally and able to conduct site visits when necessary

V. Expected Outputs

LCA study on PPEs, policy recommendations on the improvement of the PPE manufacturing value chain

Target Timeline of Activities				
#	Activity	Projected Timeline	Notes	Payment Tranche
1	Consultation with stakeholders (HWMS, DENR-EMB, HCFs, DOH etc.)	Month 1 to Month 2	Initial consultations for the preparation of work plans in relation to the target outputs a. Technical Document on the	25%

			Life Cycle Analysis of PPEs b. Technical Document on the Policy Recommendations for the improvement of the PPE manufacturing value chain	
2	Drafting of document outlining final study plan and methodology	Month 2 to Month 3	Presentation to TWG members of consultancy work plan based on outputs identified in Activity 1	25%
3	Development of report	Month 3 to Month 5	Conduct of field work, stakeholder consultations, and other activities identified in the work plan approved in Activity 2	25%
4	Endorsement of results of activity	Month 6	Endorsement of final outputs to TWG	25%