

TERMS OF REFERENCE

NATIONAL TECHNICAL ADVISOR ON GREEN CHEMISTRY

Country: Vietnam

Project name: Application of Green Chemistry in Viet Nam to support green growth and reduction in the use and release of POPs/harmful chemicals

Description of

the Assignment: 01 national technical advisor on green chemistry

Time: 110 days May 2019 – December 2020

Location: Hanoi and provinces in Vietnam

1. GENERAL BACKGROUND

The Viet Nam Chemical Agency (Vinachemia) under Ministry of Industry and Trade (MOIT) is implementing the Project “Application of Green Chemistry in Viet Nam to support green growth and reduction in the use and release of POPs/harmful chemicals (Green Chemistry)” funded by GEF/UNDP and with co-financing by Viet Nam agencies/institutions and companies. The project is currently in its first year of implementation.

The project aims to create the enabling environment for the introduction of Green Chemistry in Viet Nam and introduce Green Chemistry applications in productive sectors with the purpose of reducing the use and release of chemicals controlled under Stockholm and Minamata Conventions. The project also expects to result in a reduction in the use and release of chemicals of concern not covered under the MEAs, as well as improve energy and natural resource efficiency and generate Green House Gas (GHG) release reduction co-benefits in the sectors and industries supported by the project.

The project will reduce the use of Persistent Organic Pollutants (POPs) and release of Unintentional Persistent Organic Pollutants (U-POPs) through the introduction of green chemistry approach in six industrial sectors in Viet Nam: chrome plating, pulp and paper manufacturing, plastic manufacturing, textile, pesticides and solvents. Specific guidance for each sector will be developed, and the green chemistry approach will be streamlined into the relevant legislation. Two industrial facilities from 2 different sectors (out of the above six sectors) will be selected for the practical demonstration of the green chemistry approach. The project is structured in 3 components:

1. Developing the enabling environment for Green Chemistry in Viet Nam;
2. Promote awareness on Green Chemistry and the benefits of the application of Green Chemistry and its guiding principles; and
3. Introduce Green Chemistry approaches into priority sectors and at least 2 entities.

Based on the preliminary outcomes achieved during the project preparation phase, the following shortlist of priority sectors for the application of GC principles has been identified:

- 1) **Electro-plating industry**, due to its use of PFOS as etching agent and mist suppressant;
- 2) **Plastic manufacturing industry**, due to its use of deca-BDE (which has the potential to be degraded into POPs-PBDE) as well as PBBs (flame retardant) used in many plastic polymers and due to the use of short chain chlorinated paraffins;

- 3) **The textile industry**, due to the potential release U-POPs into products associated with contaminated raw materials (i.e. dyes), the potential use of PFOS and PFAS for water – repellency purposes, the potential use of deca-BDEs as flame retardant, and the use of chlorine as bleaching agent;
- 4) **The pulp and paper industry**, due to the use of chlorine-based bleaching agents that may result in the secondary formation of chlorinated compounds in the environment (including PCDD/F);
- 5) **The pesticide sector**, due to the continuation of the import and use of some restricted chemicals including POPs, and for the use of mercury in some pesticide or biocide formulations
- 6) **The solvent and paint sector**, due to the use of chlorinated solvents and short chain chlorinated paraffins in paints, as well as the use of mercury in some paint formulations.

To provide Project Management Unit (PMU) with technical assistance and advice on all the activities to be carried out under the Project, to help on routine technical coordination and supervision, to prepare or assist in the preparation of relevant project documentation, to prepare Terms of reference (TORs) for different project activities, UNDP and (PMU) are looking for one (01) National Technical Advisor.

2. OBJECTIVES OF THIS ASSIGNMENT

The objective of the assignment is to ensure smooth, efficient, effective and on-track implementation of the project.

3. SCOPE OF WORK

The National Technical Advisor (NTA) is expected to have two main functions:

- Assist National Project Director and Project Manager in the overall project implementation
- Project Quality Assurance (QA) and Monitoring & Evaluation (M&E)

The NTA will have the following specific responsibilities/duties:

a. Project management

- Provide strategic advice on the overall implementation of the projects by i) facilitating the project annual and quarterly planning; ii) advising the project manager on integrating risk management, quality management plan, and monitoring and evaluation plan in the annual work plan;
- Support Project manager in preparing major Project's reports (quarterly report, annual report, Project Implementation Review report, and other technical reports) emphasizing on the technical sound of these reports.
- Support NPD/PM in implementing risk management plan by i) identifying critical issues, barriers, or risks (external risks in particular); ii) advise NPD on solutions to effectively manage risks and other emerging barriers; and iii) facilitating the implementation of risk management plan approved by NPD.
- Providing comments on project implementation progress at different stages;
- Facilitate the collaboration between PMU and other project partners in planning and implementation of the project;
- Technical support to PMU in participating in meetings with UNDP and the PSC.

b. Technical Quality Assurance and Project Monitoring & Evaluation

- Support PM in developing a quality management plan. Essentially, the quality plan should include output quality criteria, guidelines and procedures for quality control, responsibility of PMU personnel, and schedules.

- Support PM in drafting key terms of reference/specifications for project activities/outputs.
- Technical support to PMU and project partners on the supervision of all the technical activities;
- Play a major role in quality review of project activities and outputs from sub-contracts and consultancy as directed by NPD/PM, and provide advice on the quality improvement of the final products or outputs;
- Assist PM to supervise local and international experts/consultants as directed by the NPD;
- Support the PM to evaluate and update all indicators and milestones that listed in Project Logical Framework to obtain the outcomes that provided in Project Document;
- Perform site visits and inspections at project implementation sites during various implementation stages (site visits and contaminated sites, industrial sites, trainings) under the requirement of NPD/PM;
- Provide comments on the reports related to the technical activities and review the related plan under the Project to ensure their technical feasibility and most appropriate measures and actions taken;
- Supervise the work of service provider to guarantee the quality and consistency of the reports and deliverables, and help them finalize reports before their dissemination to concerned parties;
- Timely and proactively provide recommendation for the improvement of all project activities.

4. DURATION OF ASSIGNMENT, DUTY STATION AND EXPECTED PLACES OF TRAVEL

National consultant: 110 working days during the period May 2019 – December 2020.

Duty station: Hanoi with travel to different provinces if needed. The exact number of travels will be specified in the course of project implementation based on project needs and will be arranged by PMU. Travel and subsistence during travel will be paid by PMU.

5. FINAL PRODUCTS / DELIVERABLES

- Project quarterly progress report, annual report, project implementation report, quarterly workplan, annual workplan that were approved by PMU;
- TORs for the required project activities: Accepted by PMU;
- Comments reports and supervision reports as relevant for the different project activities: Accepted by PMU
- Mission report and debriefing for the field visit, meeting minutes, with special reference to the technical parts.
- All of the final products/deliverables have to submit in English and Vietnamese;

6. PROVISION OF MONITORING AND PROGRESS CONTROLS

The selected consultants will work closely with PMU staff and the UNDP Programme Officer with regular consultation and guidance by the UNDP and the MOIT.

The consultants are required to regularly report to UNDP Vietnam and the PMU on the progress of the assignment implementation based on the agreed work plan.

7. DEGREE OF EXPERTISE AND QUALIFICATIONS

- Advanced degree (Master of Science as a minimum) in Engineering, Industrial Chemistry, Environmental Science, or related field;
- Sound experience on POPs, mercury, green chemistry and knowledge of Stockholm Convention;

- At least 5 year experience in the field of chemistry, or in projects related to the implementation of Stockholm Convention on POPs, or in the management of hazardous chemicals and waste;
- Previous experience as supervisor/technical advisor/manager in projects related to environmental protection or hazardous waste management or chemical field;
- Demonstrated knowledge about institutional and policy framework on chemical management and environmental management in Vietnam;
- Very good communication skills both spoken and written in Vietnamese and English (provide at least 2 reports or papers written in English).

8. PAYMENT TERMS

The following payment schedule will apply:

- 2nd & 3rd quarterly workplan submission and approval & Project Implementation Report PIR submitted: 20% of total payment
- TORs for different positions in AWP 2019 of highly quality; Comments and clearance of reports for different project activities in 2019: 30% of total payment
- AWP 2020 & TORs for different positions in 2020 of highly quality: 20% of total payment
- Quaterly workplan in 2020; PIR prepared and submitted; comments and clearance of reports for different project activities in 2020: 30% of total payment

Selection criteria

No	Criteria	Score
1	Advanced degree (Master of Science as a minimum) in Engineering, Industrial Chemistry, Environmental Science, or related field;	200
2	Sound experience on POPs, mercury, green chemistry and knowledge of Stockholm Convention	100
3	At least 5 year experience in the field of chemistry, or in projects related to the implementation of Stockholm Convention on POPs, or in the management of hazardous chemicals and waste	200
4	Previous experience as supervisor/technical advisor/manager in projects related to environmental protection or hazardous waste management or chemical field	200
5	Demonstrated knowledge about institutional and policy framework on chemical management and environmental management in Vietnam	150
6	Very good communication skills both spoken and written in Vietnamese and English	150
	Total	1000