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# Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs

#### The Federal Democratic Republic of Nepal

GEFSEC Project ID: 3573
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**Mid-Term Evaluation Report** 

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## 1 ABSTRACT

The Mid-term evaluation (MTE) of the project "Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs" was done in frame of the project monitoring and evaluation plan. Mid-term evaluation was conducted based on documents and reports evaluation as well as consultant mission to Kathmandu and interview with the main project stakeholders and partners.

#### Consultations for the Mid-term evaluation

The MTE was conducted in line with the UNIDO Evaluation Policy and the project evaluation and monitoring plan. It was carried out by evaluation consultant, under the overall responsibility of the UNIDO project manager. The MTE was prepared between May and November 2013. The MTE has the purpose of assessing the progress of the project activities, and to make recommendations useful to the continuation and successful completion of the project.

Majority of efforts were focused on the analyses of the project outcomes and activities progress and expectations for successful fulfillment of the project goals.

The main goal of the mission to Kathmandu was to assist national counterparts, their subcontractors, experts and stakeholders to implement the project to fulfill the project goals as part to the duties for Stockholm Convention.

Discussion was done also in a plenary session during the Seminar in presence of UNIDO experts and the selected company for PCBs contaminated equipment, oil and waste disposal.

The company representatives presented their readiness to conduct the acitivities as defined in the tender documents and the contract for the disposal of PCBs under the project.

Close coordination with Nepal Electricity Authority for PCBs inventory and management activities was evident during a cunsultant's mission and was shown also during the initial visit of the disposal company representatives.

Priority activities of the consultant mission were focused to:

- Review the project documents, meeting with the beneficiaries, partners and the project team;
- Present comments and recommendations for the relevant part of the project document and the project progress;
- Prepare MTE document.

## 2 Mission to Kathmandu

#### 2.1 MISSION ITINERARY

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Date	Activity	Place	Comments
18.5.	Departure	Bratislava	
19.5.	Arrival	Kathmandu	
19.5.	Meeting with Mr. Bhupendra Devkota	Hotel Ambassador	Initial discussion
20.5.	Meeting with Mr. Hari R. Shresta,	Grid operation dept.	Project execution and
	Director, NEA		plans – legislative and
	Mr. Gokarnamani Duwadi, Joint Secretary	MOSTE	technical background
	(MoSTE) & National Project Coordinator		
21.5.	Meeting with Mr. Rishi Kesh Sharma,	Kathmandu regional	PCBs management,
	Director, NEA	office	inventory, preparation
	Mr. Subhash Dahal,		for PCBs contaminated
	Director, NEA		equipment and oil
	Mr. Bhupendra Devkota	Project office, MOSTE	disposal
22.5.	Meeting with Ms. Tonilyn Lim	Project office, MOSTE	Discussions concerning
	Mr. Bhupendra Devkota		the project
			implementation
23.5.	Kick-off Meeting for PCBs contaminated	Everest Hotel	Presentation of the
	equipment and oil disposal		selected disposal
			company, discussion
			concerning the disposal
			plan details
24.5.	Meeting with Ms. Tonilyn Lim	Everest Hotel	Final meeting regarding
	Mr. Bhupendra Devkota		the MTE
25.5.	Departure	Kathmandu	
26.5.	Arrival	Bratislava	

#### 2.2 Mission Summary

The mission was conducted primarily to allow direct communication of the evaluator with the project beneficiaries, partners and the project team.

Generally the project implementation is so far successful in PCBs inventory, preparation for PCBs disposal and principal project partners declared their positive evaluation of the project achievements.

Either the project is facing delays due to frequent personnel changes on key beneficiaries, still strong commitment of the Ministry for Science, Technology and Environment (MOSTE) and Nepal Electricity Authority (NEA) representatives were present during the mission.

Legislative background for POPs management is weak in Nepal. Chemicals management is not adequately developed and regulated. Only frame legislation for the environmental and health protection exists in Nepal without specific "rules" for hazardous chemicals including persistent organic pollutants.

MOSTE with NEA and other partners in current situation proposed to implement PCBs guidance documents, due to time consuming and complicated process of higher legislative tools development, approval and implementation.

Still country is obliged to regulate POPs chemicals adequately as defined in the Stockholm Convention where Nepal is a party. Lack of legal instruments have an impact to the private as well as state sectors applicability of measures taken by the governmental authorities as well as sustainability on the national scale.

In further activities and projects the national chemicals legislation (specifically POPs) should have a priority and adequate resources should be allocated.

MOSTE and NEA representatives declared their support to the project and provide substantial commitment and frame for successful project implementation.

## 3 LIST OF ACRONYMS AND ABBREVIATIONS

APR
BAT
Best available techniques
BEP
Best environmental practices
BHC
Benzene hexachloride
COP
Conference of Parties
CTA
Chief Technical Advisor

DDT Dichlorodiphenyl Trichloroethane

DFTQC Department of Food Technology and Quality Control

DOA Department of Agriculture
DOC Department of Commerce

EIA Environmental Impact Assessment
EMS Environmental Management System

EPA Environment Protection Act

EPR Environment Protection Regulations
ESM Environmental Sound Management
FAO Food and Agriculture Organization

FNCCI Federation of Nepalese Chamber of Commerce and Industries

FO Furnace oil
FSP Full-sized Project
GC Gas Chromatograph
GEF Global Environment Facility

GIZ The German Agency for Technical Cooperation (Deutsche

Gesellschaft für Internationale Zusammenarbeit)

IR Inception Report
IW Inception Workshop

KMC Kathmandu Metropolitan City

MOAC Ministry of Agriculture and Cooperatives
MOE Ministry of Environment = MOSTE

MOEner Ministry of Energy MOF Ministry of Finance

MOFSC Ministry of Forest and Soil Conservation
MOHP Ministry of Health and Population

MOI Ministry of Industry

MOIC Ministry of Information and Communication

MOLD Ministry of Local Development

MOLJPA Ministry of Law, Justice and Parliamentary Affairs
MOLTM Ministry of Labor and Transport Management
MOPE Ministry of Population and Environment

MOSTE Ministry of Science, Technology and Environment MLTM Ministry of Labour and Transport Management

NARC Nepal Agricultural Research Council
NAST Nepal Academy of Science and Technology
NBSM Nepal Bureau of Standard and Metrology

NEA Nepal Electricity Authority

NEFEJ Nepal Forum of Environmental Journalists
NESS Nepal Environmental and Scientific Services

NFL National Forensic Laboratory
NGOs Non Governmental Organizations
NIP National Implementation Plan

Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs MTE Report, Final, 11/2013

NPC National Planning Commission

NRs Nepalese Rupees
PC Project Coordinator
PCBs Polychlorinated biphenyls
PIR Project Implementation Review

PMTC POPs Management Technical Committee

PO Project Office

POPS Persistent Organic Pollutants
PPD Directorate of Plant Protection

PU POPs Unit

RENPAP SC Regional Network on Safe Pesticide Production and Information

for Asia and the Pacific Stockholm Convention

SCISC Steering Committee on the Implementation of the Stockholm

Convention

TA Technical Advisor

TCD Thermal Conductivity Detector
TLC Thin Layer Chromatography
TTR Terminal Tripartite Review
TU Tribhuvan University

UNEP United Nations Environment Program

UNIDO United Nations Industrial Development Organization

USD US Dollars

## **4 MTE ASSESSMENT**

#### 4.1 Introduction and Project Background

#### 4.1.1 Introduction

This report presents the Mid-term Evaluation (MTE) of the UNIDO project entitled "Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs".

The project is funded by the Global Environment Facility (GEF).

The project is being implemented by the United Nations Industrial Development Organization (UNIDO), and executed by the Ministry of Science, Technology and Environment (MOSTE), and Nepal Electricity Authority (NEA). The project is planned for three years, starting in early 2011, and planned to be finalised at the end of 2013.

The MTE was conducted in line with the UNIDO Evaluation Policy, by a consultant in the period from May to June 2013, under the overall responsibility of the UNIDO Project Manager.

The present report covers the period of 2011 to the end of May 2013, but documents from the preparatory phase have also been widely used to capture the context in full.

The full Terms of Reference (TOR) for the MTE are attached as **Annex 1**.

#### 4.1.2 Project Background

The Government of Nepal ratified the Stockholm Convention on Persistent Organic Pollutants (POPs) on 13th October 2006 and submitted its National Implementation Plan (NIP) in April 2007. The Ministry of Environment is the National Focal Point for the Stockholm Convention. The NIP identified safe management of obsolete POPs pesticides and disposal of PCBs and PCBs' wastes as the top priority of the country. Accordingly, the Ministry of Environment of the Government of Nepal selected the project "Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs" as the first post-NIP project to deal with POPs management. The Medium-sized project (MSP) is envisaged to create institutional capacity to improve enforcement on POPs chemicals and eliminate PCBs and PCBs-containing equipment and wastes. The MSP is planned also to enhance the technical /analytical capacity of the country to address the POPs problem in a more comprehensive manner. The project will update and complete the inventory of PCBs and PCBs-containing equipment waste, which were developed during the NIP project. The PCBs problem would be addressed through technology transfer involving dismantling/decontamination/dechlorination process. Through public awareness campaigns, it is expected to disseminate information on the POPs pesticides and PCBs, their impact on human health and the environment as well as disposal technologies to larger groups at national level.

The project will dispose of 167 tonnes of PCBs and PCBs- containing equipment and wastes. The unique feature of the project is that PCBs would be addressed through transfer of technology from the neighbouring country viz. India which is a unique case of South-South cooperation. This South-South cooperation is being followed by UNIDO through its Regional Network on Pesticides for Asia and the Pacific (RENPAP) project to which Nepal is an active member.

At the very beginning of the project the primary focus was oriented on PCBs disposal due to complementary activity and financial support of GIZ for inventory, collection and disposal of obsolete pesticides in Nepal. This situation was communicated with GEF Secretariat and the project beneficiaries to agree on the elimination of POPs pesticides activities and re-allocation of efforts to PCBs inventory, collection and disposal as well as legislative improvement and public awareness.

During the project execution, the terms of references for contaminated equipment, oil and wastes disposal were developed and international tender was conducted with the result of selection of the winner company for disposal activities. Kick-off meeting was conducted in Kathmandu on 23rd of May 2013.

The immediate objectives of the project are to:

- Strengthen the legal and regulatory framework to ensure the environmentally sound management of POPs and PCBs and their gradual phase-out and elimination before 2025 and 2028 respectively;
- Updating the inventory and labeling of 167 tonnes of PCBs, PCBs containing electrical equipment and waste:
- Strengthening capacity for POPs and PCBs waste management and domestic treatment through implementing BAT and BEP;
- Disposal of at least 167 tonnes of PCBs, PCBs-containing equipment and wastes in an environmentally sound manner;
- Improving occupational safety measures and
- Awareness raising amongst the public.

Five substantive outcomes have been developed to achieve the project's objectives as follows:

**Outcome 1** will result in a proper legal and regulatory framework; and establishing institutional capacity in the country at all level of PCBs disposal management in an environmentally sound manner. The PCBs and PCBs-containing equipment and wastes owners are not aware of the potential risks of POPs. There is lack of owners' capacity for management of PCB-containing equipment. There is lack of comprehensive national policy on environment protection. Laws/polices for addressing POPs and PCBs are inconsistent with the Stockholm Convention. Capacity building will be carried out in regulatory and institutional development, strengthening PCB-related enforcement capabilities including laboratory capacities, and comprehensive data management.

**Outcome 2** will result in environmentally sound management (ESM) of PCBs and PCBs-containing equipment and wastes. The inventory of PCBs will be updated. Technical capacity will be strengthened through training of the staff and providing adequate PPE. PCB management and phase-out plans will be developed and implemented. Dedicated lines will be established for the handling and dismantling the PCB containing equipment. Occupational safety will be integrated in the management of POPs and PCBs in ESM.

**Outcome 3** will establish the final disposal mechanism of PCBs. Storage facilities and proper packaging will be provided. BEP will be introduced for proper management. BAT through transfer of technology will be introduced for disposal of at least 167 tonnes of PCBs and PCBs-containing equipment and wastes.

**Outcome 4** will provide appropriate public awareness tools and programmes to understand the health and social impact of POPs and PCBs. General public knowledge/awareness is very low concerning the harmful health effects of POPs and PCBs. Potentially PCB containing transformer oils are used for domestic purposes. Dedicated training will be provided to the concerned personnel engaged in the process.

**Outcome 5** relates to the project management, monitoring, and evaluation. This will include establishment of the Steering Committee composed of national and local stakeholder agencies, recruitment of national and international consultants, execution of a management training program

for project staff (particularly at the local level), and ongoing monitoring and reporting of project activities.

It is planned to perform all planned activities of the project till the end of year 2013. Still there is a proposal to extend the project execution for another 6 moths to focus on the project results dissemination and sharing of results and good practices in PCBs management for private industry as well as governmental institutions of Nepal. The project partners are responsible to decide on the project extension and communicate the decision with UNIDO and the GEF Secretariat.

#### 4.1.3 Project Partners

The main stakeholders have been identified during the development of the National Implementation Plan of the Stockholm Convention on POPs in Nepal. Most of the stakeholders described hereinafter participated in the formulation of the present project document with the intention to get involved in its implementation, thus upgrading their human, institutional and technical capabilities to implement the requirements of the SC related to PCB phasing out and disposal. Having these capabilities will enable them to continue the PCB-compliance activities after the termination of the project. On the other hand based on the project focus on PCBs inventory and disposal, practical involvement is a case for the Nepal Electricity Authority and the Ministry of Science, Technology and Environment.

The Ministries of Environment (MOE) (nowadays the Ministry of Science, Technology and Environment (MOSTE)), Agriculture and Cooperatives (MOAC), Industry, Commerce and Supplies (MOICS), Energy (MOEner), Health and Population (MOHP), Local Development (MOLD) and Finance (MOF) are mainly responsible for the protection of the environment and human health with respect to POPs chemicals. The management of toxic chemicals, such as pesticides and their residues, insulating dielectric fluids, the formulation of rules and regulations on these issues and their implementation and monitoring, as well as promotion of international cooperation are among the tasks of these ministries.

MOSTE formulates and enforces the rules and regulations on environmental issues, especially for the protection of the environment through control and compliance monitoring. MOSTE needs more environmental officers to effectively implement its plans and programs on environmental monitoring, environmental assessment, pollution control and compliance monitoring as well as on environmental promotion and extension. As specified in the EPA 97 (Environmental Protection Act) and EPR 97 (Environmental Protection Regulation), the regular monitoring of the environmental conditions is a responsibility of the MOSTE with the support of Environmental Inspectors.

Nepal Electricity Authority (NEA) under the Ministry of Energy decides the quantity of the dielectric fluid to be purchased through tender notices and sets the standard of the transformer oil it purchases directly or through private sector suppliers.

The Department of Customs under the MOF is in-charge of controlling and enforcing the regulation related to trade, export and import of goods including chemicals.

The Quarantine Officers under the MOAC are posted at border/check points for the control of food, pesticides and plant material import and export. MOAC formulates policy and legislation regarding the pesticides. MOAC is the owner of obsolete pesticides stored in different warehouses. The Plant Protection Directorate under this Ministry is responsible for controlling plant protection materials. District Agriculture Development Offices in the country recommend and monitor the use of agrochemicals including the pesticides.

MOICS is responsible for the industrial activities and through the Industrial Act, regulations and standards promotes a cleaner production.

MOHP regulates the import and use of pesticides in vector control and formulates regulations and guidelines for the control of hazardous wastes through the Health Care Waste Management.

MOLD is the line Ministry that regulates the solid waste management through Solid Waste Management and Resource Mobilization Centre.

## 5 Scope, Objective and Methods of this Evaluation

#### 5.1 OBJECTIVE AND SCOPE OF THE MTE

The objective of the Mid-term evaluation (MTE) is to enable the Implementing Agencies, Executing Agencies and other stakeholders to assess the progress in delivery of project outcomes and, based on this assessment, to take decisions on the future orientation and emphasis of the project during its remaining time. The review focuses on progress of implementation of planned project activities and outputs, against actual results to-date and, as far as possible, establishes the initial project outcomes and sustainability. The risks to achievement of project outcomes and sustainability are also appraised.

The evaluation has assessed the overall implementation success of the project, focussing on the achievement of outputs and activities reflecting the revised Project Activities Plan.

#### 5.2 METHODS AND LIMITATIONS

The MTE was conducted as an in-depth evaluation using a participatory approach. The UNIDO Project Manager was kept informed and regularly consulted throughout the evaluation. The Evaluator made a desk study of a number of documents, mission to Kathmandu, and attended the Kick-off meeting for disposal of PCBs based on tender process resulted in the respective disposal company selection.

The evaluation was based on the revised project document which is primarily focused on the PCBs inventory and disposal. Pesticides inventory and disposal was done by GIZ outside of the project and this fact was communicated with GEF and stakeholders. In the time of evaluation the revised project document was not formally signed by the MOSTE.

Specifically, the evaluation considered the documents listed in **Annex 2** List of Documents Reviewed, including following documents:

- a. The project documents, outputs, monitoring reports (such as progress and financial reports to UNIDO, annual Project Implementation Review Reports) and relevant correspondence.
- b. Notes from the Steering Committee meetings.
- c. Other project-related material produced by the project staff or partners, including the outcomes of partnership meetings.

The evaluator was able to meet with key representatives of stakeholders and the project team. List of persons met is in Annex III of this document.

### 6 Project Outcomes and Activities Evaluation

#### 6.1 PROJECT OUTCOMES AND ACTIVITIES EVALUATION BY STATUS, EVIDENCE AND SUMMARY

Outcome 1: Strengthening of institutional capacity building, policy/legal framework and enforcement strategy for PCBs Outputs/Activities

Output 1.1 Policies and laws addressing POPs and PCBs revised

Responsible

Activity 1.1.1: Evaluate gaps between the obligations of the SC and the

MOE, MOEner, MOAC, UNIDO

current regulations

Status: Partially done

Evidence: Policy Review Report; April 2013;

Summary: Focused primarily on PCBs not adequately addressing other POPs; recommendations not

elaborated satisfactorily.

Activity 1.1.2: Revise and update existing national legislation

MOE, MOEner, MOAC, MOLJPA

addressing POPs and PCBs

Status: Partially done.

Evidence: No document availabe concerning the revision or up-date.

Summary: The project team identified the legislation suitable for revision or up-date during the Planning Workshop held in Kathmandu in 2011. Some parts are elaborated more in the Policy Review Document. Actual revision and updating was not done, national legislation addressing POPs and PCBs do not exist.

**Activity 1.1.3:** Issue new/revised regulations addressing POPs and PCBs

MOE, MOEner, MOAC, (on approval of Parliament/Cabinet

of Ministers)

Status: Partially done

Evidence: Guidelines For Environmentally Sound Management and Disposal of PCBs; April 2013; Summary: Focused on PCBs which is in line with the project main goals; to make revision or update for other POPs is not expected; Formal agreement to exclude other POPs with the project beneficiaries not documented. Level of legislative document seems to be low for real impact outside the project activities and partners.

Activity 1.1.4: Harmonize sector regulations

MOE, MOEner, MOAC

Status: Not done.

Evidence: No document availabe concerning the harmonization of sector regulations.

Summary: Only legislative document developed during the project is the PCBs Guideline. Involved sectors

covers NEA and MOSTE.

Activity 1.1.5: Establish a dedicated administrative unit for POPs

MOE

management

Status: Done.

Evidence: Communication with MOSTE.

Summary: Unit formally establised but not as a part of officia structure and the position in new structure

reflecting the creation of the Environmental dept. is not clear.

Output 1.2: Appropriate technical/analytical capacity in place for enforcement

Activity 1.2.1: Upgrade the Governmental reference laboratory for PCB

analyses

Status: Not done.

Evidence: No.

Summary: Extensive communication during the project execution shows that there is no governmental reference laboratory to be upgraded. If that will be the definite result of an extensive search for possibilities, then revised plan should be adopted. At least, the proposal for the PCBs analytical capacity building should be developed and maximum possible support should be directed to NEA laboratory capacities and performance.

Activity 1.2.2: Upgrade the Customs laboratory for PCB analysis

DOC

Status: Not done. Evidence: No.

Summary: It seems that there is no customs laboratory to be upgraded for PCBs analyses. Customs authority involvement is not evident and most probably not relevant due to missing legislative frame for their role in the PCBs oil control on the boarder.

Activity 1.2.3: Establish official methods and limit values for PCBs

MOE, NBSM, DFTQC, UNIDO

Status: Partially done.

Evidence: PCBs Guidance Document.

Summary: Only one limit value of 50 ppm for transformer oil is mentioned.

Comments: Limit values should be stated in accordance with the Stockholm Convention requirements for PCBs contamination of transformer oil, but also from the practical point of view the high level of contamination should be defined which will dedicate level of feasibility for dechlorination. More to that,

Activity 1.2.4: Accredit the Governmental reference laboratory for PCB NBSM

limit values for soil contamination, wastes and other matrices could be proposed.

analysis

Re A 1.2.1

Activity 1.2.5: Prepare an electronic PCB database

MOE, NEA

Status: Done.

Evidence: Electronic database on-line.

Summary: Linked to PCBs equipment inventory in NEA on-line database of transformers was established.

Output 1.3: Enforcement of POPs and PCB-related improved regulations.

Activity 1.3.1: Strengthen MOE POPs Unit for enforcement

MOE, DFTQC, NEA, PPD

Status: Done. Evidence: Training.

Summary: Training was provided for MOSTE employees.

Activity 1.3.2: Regular customs inspections through documents given

DOC, PPD

by manufacturers Status: Not done. Evidence: No.

Summary: Customs inspections not performed for PCBs in oil or potentially contaminated equipment.

Activity 1.3.3: Regular environmental inspections at PCB owners

MOE

Status: Not done. Evidence: No.

Summary: MOSTE has no capacity for such an activity.

Activity 1.3.4: Develop practical measures to prevent using PCB

MOE, NEA

containing transformer oils in welding workshops

Status: Not done. Evidence: No.

Summary: No document or other evidence that there is a clear plan how to manage this issue available, but it was announced by NEA during the Kick-Off meeting with SETCAR that they have "Stopped auctioning' untested oil.

#### Output 1.4: Capacity for ESM of POPs and PCBs strengthened

Activity 1.4.1: Evaluate the current practices for management of PCBs MOE, MOAC (PPD)

Status: Done.

Evidence: PCBs Guideline.

Summary: Activities organized in terms of NEA involvement. Still it should be of benefit to check the

situation in private sector and govenrnmental sectors outside of NEA.

Activity 1.4.2: Evaluate the current practices for management of PCBs MOE, NEA

Status: Done.

Evidence: PCBs Guideline.

Summary: Current practices do not adequately control PCBs contamination. Cross-contamination possible.

Activity 1.4.3: Train manpower for the regular maintenance of the MOE, MOAC, UNIDO

PCBs databases

Status: Done.

Evidence: PCBs Training.

Summary: Activities organized in close cooperation with NEA. Training files and list of attandees available.

7 persons trained from NEA, MOSTE and project office.

#### Outcome 2: Establishment of environmentally sound management (ESM) system for POPs and PCBs

#### Output 2.1: PCBs inventories updated

Activity 2.1.1: Inventorize and label 2500 oil-containing electrical equipment MOE, NEA under the ownership of NEA

Status: Done.

Evidence: Inventory report.

Summary: In total, 2557 samples were collected from aforementioned locations covering all the power

transformers and distribution transformers all over Nepal and Kathmandu respectively.

Activity 2.1.2: Inventorize all oil stocks of NEA in Kathmandu MOE, NEA

Status: Done.

Evidence: Inventory report.

Summary: Oil stocks identified. Stored in NEA facilities.

#### Output 2.2: rejected

#### Output 2.3: Technical capacity for ESM of PCBs strengthened

Activity 2.3.1: Strengthen NEA laboratory of PCB analysis NEA, UNIDO

Status: Not done. Evidence: No.

Summary: Extensive communication during the project execution shows that there is no NEA laboratory to be strengthen in terms of relevant laboratory personnel and instruments. Still mobile screening equipment is used for PCBs analyses in transformer oil. It has to be evaluated and decided if there is a possibility to stregthen NEA analytical capabilities and capacities.

Activity 2.3.2: Develop a separate line for handling and dismantling of PCBcontaining equipment

NEA, UNIDO

Status: Not done. Evidence: No.

Summary: Identified 2 places under NEA facilities for disposal which should cover handling of contaminated PCBs equipment. It is expeted that handling and dismantling line of PCBs contaminated equipment will be established during the disposal phase of the project with assistance of the dosposal company under supervision of MOSTE.

Activity 2.3.3: Provide adequate packaging materials for PCB-containing

NEA
equipment and wastes

Status: Not done.

Evidence: No.

Summary: Disposal company selected for treatment of contaminated equipment and oil. Need for packaging material will be evaluated besed on actual situation.

Activity 2.3.4: Provide adequate safety gears for NEA personnel NEA, UNIDO

Status: Not done. Evidence: No.

Summary: Disposal company selected for treatment of contaminated equipment and oil. Need for packaging material will be evaluated besed on actual situation.

Activity 2.3.5: Provide emergency response equipment for NEA interim NEA, UNIDO storage facility

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Status: Not done. Evidence: No.

Summary: Disposal company selected for treatment of contaminated equipment and oil. Need for

packaging material will be evaluated besed on actual situation.

Activity 2.3.6: Train 30-40 people for handling, clean-up, packaging and

MOE, NEA, UNIDO

transportation of PCB containing equipment

Status: Done.

Evidence: Training report.

Summary: Training provided by international expert. 60 people trained.

#### Output 2.4: Occupational safety working environment improved

Activity 2.4.1: Develop occupational safety procedures for NEA

MOLTM, NEA

Status: Not done. Evidence: No.

Summary: Actual occupational safety procedures should be improved. Disposal company selected for treatment of contaminated equipment and oil will be providing specific training and support for NEA personnel. Occupational safety procedures during the dismantling and disposal operations need to be defined, agreed and followed.

Activity 2.4.2: Undertake inspection programmes for enforcement of

MOLE, MOSTE

occupational safety measures

Status: Not done. Evidence: No.

Summary: It is expected that during the disposal phase the activity will be completed.

Activity 2.4.3: Hold training workshops for implementation of the

MOSTE, MOLE, MOEner

occupational safety guidelines and the use of Personal Protective Equipment

(NEA)

(PPE)

Status: Partially done. Evidence: Training report.

Summary: This area was partially covered during the training provided. Disposal company selected for treatment of contaminated equipment and oil. Occupational safety procedures need to be defined, agreed and followed.

Activity 2.4.4: Strengthen Environment and Social Department of NEA to

NEA

supervise occupational safety matters

Status: Partially done. Evidence: Training report.

Summary: This area was partially covered during the training provided. Disposal company selected for treatment of contaminated equipment and oil will train local staff for specific measures to be used. Still more should be done to secure adequate practical knowledge – it is expected that during the disposal phase the activity will be completed.

#### Outcome 3: Final disposal mechanism of PCBs

#### Outputs/Activities Responsible

#### Output 3.1 An interim storage location for PCB wastes established

Activity 3.1.1: Upgrade one storage location for environmentally NEA, UNIDO

sound dismantling of PCB-containing equipment

Status: Not done. Evidence: No.

Summary: 2 sites proposed. After the final selection plan for upgrade should be prepared and agreed.

Activity 3.1.2: Transfer of technologies for safe handling and

MOE, NEA, UNIDO

separation of PCB containing wastes

Status: Partially done.

Evidence: TORs for disposal company selection.

Summary: Disposal company selected for treatment of contaminated equipment and oil. Disposal plan

prepared and presented.

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Activity 3.1.3: Introduce BEP at the interim storage facility for local NEA

separation of PCB wastes

Status: Not done. Evidence: No.

Summary: Disposal company selected for treatment of contaminated equipment and oil.

Activity 3.1.4: Train 10-15 staff on safe operation of interim storage

MOE, NEA, UNIDO

facility

Status: Not done. Evidence: No.

Summary: Disposal company selected for treatment of contaminated equipment and oil.

Comments: Disposal company will train the staff.

## Output 3.2: Final disposal of 167 tonnes of PCBs and PCB-containing equipment and wastes implemented

Activity 3.2.1: Decontaminate/dechlorinate ~150 tonnes of low MOE, NEA, UNIDO

contaminated transformers

Status: Not done. Evidence: No.

Summary: Quantity changed to 147 tones of oil = 385 tones of total weight of contaminated

transformers. Also 27 tones of oil in barrels is identified.

Activity 3.2.2: Dechlorinate ~45 tonnes of low contaminated MOE, NEA, UNIDO

transformer oil

Re 3.2.1

Activity 3.2.3: Clean-up of ~17 tonnes of pure PCB transformers MOE, NEA, UNIDO

Status: Not done. Evidence: No.

Summary: Not actually needed. No pure PCBs transformers found.

Activity 3.2.4: Final disposal of ~7 tonnes of pure PCBs and other MOE, NEA, UNIDO

wastes

Status: Not done. Evidence: No.

Summary: Not actually needed. No pure PCBs transformers found.

#### Outcome 4: Public education, awareness and information education, awareness and information

#### Outputs/Activities Responsible

#### Output 4.1: Public awareness tools and campaigns prepared and implemented

Activity 4.1.1: Develop public awareness tools MOE, UNIDO

Status: Partially done. Evidence: Draft document.

Summary: To be finalised. Draft ready.

Activity 4.1.2: Undertake public awareness campaigns addressing MOE, MOAC, MOEner, NEA, health related aspects of POPs pesticides and PCBs undertaken MOIC, MOHP, MOLD, Local govt., UNIDO, GIZ

Status: Partially done. Evidence: Training materials.

Summary: Already started due training. The plan should be developed and scheduled for the remaining time

available.

#### Outcome 5: Establishment of project management structure

#### Outputs/Activities Responsible

Output 5.1: Project management structure established

Activity 5.1.1: Establish POPs Unit (PU), and appoint Project Manager MOE, UNIDO

Status: Done.

Evidence: Documents, communication.

Summary: POPs unit established (1 desk officer on MOSTE), 1 supporting staff hired by the project.

2 people appointed from MOSTE to take active role in the project, participate on the training, inventory

and other project activities.

Activity 5.1.2: Establish SCISC and PMTC

MOE, UNIDO

Status: Done.

Evidence: Minutes, communication.

Summary: In function.

Activity 5.1.3: Recruit Chief Technical Advisor (CTA), policy experts, and

UNIDO, MOE

technical experts

Status: Done.

Evidence: Communication.

Summary: CTA not recruited, but other experts hired for specific tasks under the project. CTA will not be recruited. Formal decision is missing. The project has an principal expert hired Mr. Bhupendra Devkota.

**Activity 5.1.4:** Hold project management training for project management

UNIDO, MOE

staff

Status: Done.

Evidence: Minutes and training documents.

Summary: MOSTE representatives present on the training.

Activity 5.1.5: Establish focal points within stakeholder organizations

MOE, MOAC, MOEner, NEA,MOIC, MOHP, MOLD & Local govt., UNIDO, GIZ

Status: Done.

Evidence: Minutes, communication.

Summary: Focal points were designated by the organizations participating in Steering Committee and Technical Committee. NEA appointed the designated person directly for the project and disposal activities.

MOSTE appointed 2 persons to participate on the project activities.

Activity 5.1.6: Establish project management information system (MIS),

MOE, UNIDO

including a project website to disseminate information to stakeholders

Status: Done.

Evidence: Communication.

Summary: Project management information system could be considered as establishe taking into account the network communication organized by the project team. Specific project website is not established, but the project information is on some extend provided on the MOSTE webpage.

#### Output 5.2: Project monitoring and evaluation designed and implemented

### Activity 5.2.1: Organize Inception Workshop

MOE, UNIDO

Status: Done. Evidence: Minutes. Summary: -

#### Activity 5.2.2: Measure impact indicators

MOE, UNIDO

Status: Not done yet. Evidence: No.

Summary: -

#### Activity 5.2.3: Carry out annual project financial audits

MOE

Status: Done.

Evidence: Internal documentation, communication.

Summary: UNIDO Finance at HQs keeps track of expenditures and PMs together with nat'l expert ensures

proper disbursement of funds and record-keeping.

#### Activity 5.2.4: Prepare Quarterly Project Review Reports

MOE

Status: Done

Evidence: Quarterly reports, communication.

Summary: Activities documented on the specific tasks manner and summarized quarterly – found

satisfactorily.

Activity 5.2.5: Hold Annual PSC meetings	MOE, UNIDO, stakeholders
Status: Done.	
Evidence: Minutes, communication.	
Summary: 3 PSC meetings already provided. Minute are available.	
Activity 5.2.6: Carry out mid-term external evaluation	UNIDO
Status: Done	
Evidence: MTE Report.	
Summary: Report developed.	
Activity 5.2.7: Carry out final external evaluation	UNIDO
Status: To be done.	
Activity 5.2.8: Complete Project Terminal Report	MOE, UNIDO

Status: To be done.

## 6.2 PROJECT OUTCOMES AND ACTIVITIES EVALUATION BY SUMMARY TABLES

Outcome 1: Strengthening of institutional capacity building, policy/legal framework and en	forcement strategy		
for PCBs Outputs/Activities			
Output 1.1 Policies and laws addressing POPs and PCBs revised			
Activities	<b>Current Status</b>		
Activity 1.1.1: Evaluate gaps between the obligations of the SC and the current regulations	Partially done		
Activity 1.1.2: Revise and update existing national legislation addressing POPs and PCBs	Partially done		
Activity 1.1.3: Issue new/revised regulations addressing POPs and PCBs	Partially done		
Activity 1.1.4: Harmonize sector regulations	Not done		
Activity 1.1.5: Establish a dedicated administrative unit for POPs management	Done		
Output 1.2: Appropriate technical/analytical capacity in place for enforcement			
Activity 1.2.1: Upgrade the Governmental reference laboratory for PCB analyses	Not done		
Activity 1.2.2: Upgrade the Customs laboratory for PCB analysis	Not done		
Activity 1.2.3: Establish official methods and limit values for PCBs	Partially done		
Activity 1.2.4: Accredit the Governmental reference laboratory for PCB analysis	Not done		
Activity 1.2.5: Prepare an electronic PCB database	Done		
Output 1.3: Enforcement of POPs and PCB-related improved regulations			
Activity 1.3.1: Strengthen MOE POPs Unit for enforcement	Done		
Activity 1.3.2: Regular customs inspections through documents given by manufacturers	Not done		
Activity 1.3.3: Regular environmental inspections at PCB owners	Not done		
Activity 1.3.4: Develop practical measures to prevent using PCB	Not done		
Output 1.4: Capacity for ESM of POPs and PCBs strengthened			
Activity 1.4.1: Evaluate the current practices for management of PCBs	Done		
Activity 1.4.2: Evaluate the current practices for management of PCBs	Done		
Activity 1.4.3: Train manpower for the regular maintenance of the PCBs databases	Done		

Outcome 2: Establishment of environmentally sound management (ESM) system for POPs and PCBs			
Output 2.1: PCBs inventories updated			
Activities	Current Status		
Activity 2.1.1: Inventorize and label 2500 oil-containing electrical equipment under the	Done		
ownership of NEA			
Activity 2.1.2: Inventorize all oil stocks of NEA in Kathmandu	Done		
Output 2.3: Technical capacity for ESM of PCBs strengthened			
Activity 2.3.1: Strengthen NEA laboratory of PCB analysis	Not done		
Activity 2.3.2: Develop a separate line for handling and dismantling of PCB-containing	Not done		
equipment			
Activity 2.3.3: Provide adequate packaging materials for PCB-containing equipment and	Not done		
wastes			
Activity 2.3.4: Provide adequate safety gears for NEA personnel	Not done		
Activity 2.3.5: Provide emergency response equipment for NEA interim storage facility	Not done		
Activity 2.3.6: Train 30-40 people for handling, clean-up, packaging and transportation of	Done		
PCB containing equipment			
Output 2.4: Occupational safety working environment improved			
Activity 2.4.1: Develop occupational safety procedures for NEA	Not done		
Activity 2.4.2: Undertake inspection programmes for enforcement of occupational safety	Not done		
measures			
Activity 2.4.3: Hold training workshops for implementation of the occupational safety	Partially done		
guidelines and the use of Personal Protective Equipment (PPE)			
Activity 2.4.4: Strengthen Environment and Social Department of NEA to supervise	Partially done		
occupational safety matters			

Outcome 3: Final disposal mechanism of PCBs			
Output 3.1 An interim storage location for PCB wastes established			
Activities	<b>Current Status</b>		
Activity 3.1.1: Upgrade one storage location for environmentally sound dismantling of PCB-	Not done		
containing equipment			
Activity 3.1.2: Transfer of technologies for safe handling and separation of PCB containing	Partially done		
wastes			
Activity 3.1.3: Introduce BEP at the interim storage facility for local separation of PCB	Not done		
wastes			
Activity 3.1.4: Train 10-15 staff on safe operation of interim storage facility	Not done		
Output 3.2: Final disposal of 167 tonnes of PCBs and PCB-containing equipment and wastes			
implemented			
Activity 3.2.1: Decontaminate/dechlorinate ~150 tonnes of low contaminated transformers	Not done		
Activity 3.2.2: Dechlorinate ~45 tonnes of low contaminated transformer oil	Not done		
Activity 3.2.3: Clean-up of ~17 tonnes of pure PCB transformers	Not done		
Activity 3.2.4: Final disposal of ~7 tonnes of pure PCBs and other wastes	Not done		

Outcome 4: Public education, awareness and information education, awareness and information		
Output 4.1: Public awareness tools and campaigns prepared and implemented		
Activities	<b>Current Status</b>	
Activity 4.1.1: Develop public awareness tools	Partially done	
Activity 4.1.2: Undertake public awareness campaigns addressing health related aspects of	Partially done	
POPs pesticides and PCBs undertaken		

Outcome 5: Establishment of project management structure			
Output 5.1: Project management structure established			
Activities	Current Status		
Activity 5.1.1: Establish POPs Unit (PU), and appoint Project Manager	Done		
Activity 5.1.2: Establish SCISC and PMTC	Done		
Activity 5.1.3: Recruit Chief Technical Advisor (CTA), policy experts, and technical experts	Done		
Activity 5.1.4: Hold project management training for project management staff	Done		
Activity 5.1.5: Establish focal points within stakeholder organizations	Done		
Activity 5.1.6: Establish project management information system (MIS), including a project	Done		
website to disseminate information to stakeholders			
Output 5.2: Project monitoring and evaluation designed and implemented			
Activity 5.2.1: Organize Inception Workshop	Done		
Activity 5.2.2: Measure impact indicators	Not done		
Activity 5.2.3: Carry out annual project financial audits	Done		
Activity 5.2.4: Prepare Quarterly Project Review Reports	Done		
Activity 5.2.5: Hold Annual PSC meetings	Done		
Activity 5.2.6: Carry out mid-term external evaluation	Done		
Activity 5.2.7: Carry out final external evaluation	Not done		
Activity 5.2.8: Complete Project Terminal Report	Not done		

### 7 COMMENTS AND RECOMMENDATIONS

#### **Summary of findings**

UNIDO/GEF project "Nepal: Environmentally Sound Management of POPs Pesticides and Disposal of PCBs" is slightly in delays, but generally reaching the goals as described in the revised Project Document, Activity/Workplan and budget.

The main goal to dispose PCBs contaminated oil and equipment is to be achieved and the status of implementation is that disposal company (SETCAR) was selected and Kick-off meeting was done (May 23, 2013).

The project document was developed originally in 2010 combining disposal for PCBs as well as pesticides in Nepal. Outputs related to pesticides has been abolished to reflect the agreement among GEF, UNIDO and GIZ.

Revised Activity/Workplan and budget was prepared on November 2011 (during the Vienna Proj. Mgt Training with active participation of MOSTE offcials) and sent to MOSTE officials for approval. Unfortunately there is not an official approval by MOSTE management available at the moment, except for the Minutes of a Steering Committee Meeting approving the Work Plan. On the other hand the Project Steering Committee (PSC) is working with revised Activity/Workplan and budget and it is expected that formal approval by MOSTE and PSC will approve formally the current status.

MTR evaluation is focusing on the revised Activity/Workplan and budget proposed there due to fact that pesticides disposal part was already done by GIZ and the revised Activity/Workplan reflects an agreement of the project partners and donors.

PCBs disposal part of the project is on good progress and successful implementation of Outcome 3 is highly probable.

Detail breakdown of situation is provided in Chapter 4.3 of this document.

#### **Comments and Recommendations**

## Outcome 1: Strengthening of institutional capacity building, policy/legal framework and enforcement strategy for POPs pesticides and PCBs

#### Output 1.1: Policies and laws addressing POPs pesticides and PCBs revised

Policy Evaluation Report was developed and presented and PCBs Guidelines developed and sent to MOSTE and NEA.

It is clear that national legislation addressing Stockhom Convention requirements is not satisfactorily present in Nepal. PCBs Guidelines is perhaps the practical solution at the moment, but much more effort is needed.

It is perhaps too ambitious to expect that this project will have enough time and resources to develop the laws to be directly implemented by the government, but at least the proposal of legislative framework should be provided and proposed to the government of Nepal, so it could result in the decision on the detailed plan for the national legislation development, approval and implementation.

#### Output 1.2: Appropriate technical/analytical capacity in place for enforcement

PCBs analyses were provided by a L2000DX Analyzer for inventory purpose in Nepal in frame of this project. In case of positive screening result (PCB > 50 ppm) verification by gas chromatography is always necessary. That part was not done for practical reasons – no laboratory under MOSTE or NEA was ready to provide such an expertise. More to that during the project execution there was not possible to identify the relevant laboratory to be up-graded.

It is certainly better to use the limited financial resources for an activities which could be done in frame of the project time and budget frame then to leave an analytical equipment without use, but it is highly recommended to try to find the solution in coordination with MOSTE and NEA to improve the analytical capabilities in Nepal. In case there is no chance to effectively "up-grade" the national laboratory, PSC should decide on alternatives in scope of the project. In that case the project proposal for an establishment of the national leboratory for PCBs (respectively POPs) analyses should be developed and provided to the beneficiaries.

#### Output 1.3: Enforcement of POPs and PCB-related regulations improved

Involvement of customs authority in the PCBs control did not achieve the level of real and practical action and there is no evidence that this activity could be done in frame of this project. PSC should decide on the steps toward involvement of customs authority in PCBs contaminated equipment or oil import control in future. . It is believed that customs will only start to control PCBs if MOSTE and MF will issue the ban or restrictions for PCBs in specific electro equipment and will request the responsible ministry for an action.

Practical performance of control by MOSTE personnel should be discussed and tested during the PCBs disposal phase. Initial environmental inspection was already done during the inventory phase. Effectiveness of compliance check will also closely depend on the legislative tools to be introduced in Nepal.

#### Output 1.4: Capacity for ESM of POPs and PCBs established

Existing practices for PCBs management were done within the inventory where 2 MOSTE staff and a few NEA staff participated. Training on ESM of PCB was conducted by international consultant. It is of concern that the capacity for ESM of PCBs did not widely cover also the private industry and other potential PCBs contaminated equipment owners. Sustainability could be achieved by development of the national-wide strategy for PCBs ESM which will be supported by the relevant legislative tools.

The project could build on the present results and PCBs Guidance Documents to be used as a base for the future ESM of PCBs.

#### Outcome 2: Establishment of ESM system for POPs and PCBs

#### Output 2.1: PCBs inventories updated

Activity is satisfactorily done in NEA. Other potential PCBs contaminated equipment owners were not directly part of the current project. This means a challenge for the sustainability of the project results. If not addressed adequately cross-contamination will be possible during the repair and handling.

New Environmental dept. was established which should receive the budget allocation from July 2013. Training of additional personnel will be needed. The legislative base is not clear due to guidance document alone could not be sufficient for control of private industry and potential PCB contaminated oil and equipment owners.

This issue should be discussed and practical measures proposed.

Output 2.2 has been abolished to reflect GEF's request to remove pesticide final disposal activities from this project.

#### Output 2.3: Technical capacity for ESM of PCBs strengthened

Training and practical inventory of PCBs contaminated equipment provides a base for technical capacity strengthening. Laboratory for PCBs analyses other then using a test kits is not available under the MOSTE or NEA. Customs capabilities remain inadequate.

It is proposed that frame plan for future activities will be developed either based on national funds or as a separate project proposal to cover PCBs analytical capabilities solely or in wider scale for POPs as defined by the Stockholm Convention.

#### Output 2.4: Occupational safety working environment improved

Activities under the project not yet started, but important during the disposal activities taking into account general safety measures in NEA already in place. Disposal activities are now to be implemented and strict risk management measures should be applied.

Guidelines are expected to be developed and used in NEA, but also available for any other potential users.

#### **Outcome 3: Final disposal mechanism of PCBs**

#### Output 3.1 An interim storage location for PCB wastes established

Possible storage locations were identified through validated assessments but upgrading will be done together with contract of services for equipment and oil dechlorination / treatment. Disposal company agreed with proposed locations and details are to be managed in cooperation with NEA.

Formal and practical establishment of separate line for handling of PCB containing equipment and oil is critial and should be defined under MOSTE supervision. Environmental and technical criteria defined and agreed with MOSTE should be implemented. Measures to avoid contamination of the environmental compartments should be defined. Limit values established and controlled.

#### Output 3.2 has been abolished.

#### Output 3.3 Final disposal of 167 tonnes of PCBs and PCB containing wastes undertaken

Disposal activities just started and it is expected that will be finished till the end of year 2013.

#### Outcome 4: Public education, awareness and information

#### Output 4.1: Public awareness tools and campaigns prepared and undertaken

The activities already started due training but public awareness activities still should be done.

The plan should be developed and implemented for the remaining time available.

#### Outcome 5: Establishment of project management structure

Project management structure and arrangements are found satisfactorily on the place.

#### 8 Project Performance and Impact

#### 8.1 Introduction

The project was originally designed to cover inventory, collection and disposal of both – obsolete pesticides and PCBs. During the project preparatory phase the pesticides part was taken by GIZ and so the GEF funded project solely deal with PCBs. GEF secretariat was informed about the development and revised project plan was agreed with the project beneficiaries.

PCBs part is in good progress in terms of PCBs inventory under NEA and successful selection process for PCBs disposal company. Tender winner declared on the Kick-off meeting that the company has capacity and capability to conduct the work defined in signed contract. It is expected that disposal activities will last at the end of 2013.

Project performance is assessed and discussed under the assessment of outcomes and activities.

#### **8.2** EFFECTIVENESS

The project to date has been effective, if measured on the basis of revised planned outputs and outcomes in PCBs inventory and PCBs disposal.

The main goal of the project, namely to dispose PCBs contaminated equipment and oil, seems to be achievable due to successful identification of contaminated equipment through inventory done in NEA as well as selection process of disposal company which declared readiness to start disposal activities with the plan to complete work till the end of year 2013.

#### 8.3 RELEVANCE

The project is highly relevant for the POPs management in Nepal. In fact this project represents the first practical activity in area of the Stockholm Convention after Nepal became a party and finalizing the National Implementation Plan.

Majority of activities related to PCBs are done with the National Electricity Authority. Successful implementation should play an important role for implementation of environmentally sound management of PCBs in national scale to be implemented also in private industry and other relevant sectors.

#### **8.4** SUSTAINABILITY

The project sustainability will be highly dependent on the legislative tools and practical measures to be done in the PCBs management of Nepal.

The present achievements shows progress in case of the National Electricity Agency. NEA has agreed to implement the PCBs Guidance Document developed by the project to be approved by MOSTE. Practical measures and internal rules are implemented by NEA.

For the national scale implementation which will cover also private industry and other sectors where PCBs contaminated equipment could be found higher legislative instruments will be necessary.



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

# Establishment of Environmentally Sound Management (ESM) and disposal of PCBs

#### JOB DESCRIPTION

**Project** GFNEP10001 (SAP ID 104052)

Post title Evaluation Consultant

**Duration** 30 work days including travel to Nepal for 9 days

(inclusive of travel days) over a period until 31 May 2013

Start date 01 May 2013

**Duty station** Home based and travel to Kathmandu, Nepal

**Duties** The consultant will evaluate the projects according to the

Terms of Reference. S/he will be responsible for

preparing the draft and final evaluation report, according to the standards of the UNIDO Evaluation Group. S/he

will perform the following tasks:

Main duties	Duration/ location	Deliverables
Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and prepare key instruments (questionnaires, logic models) to collect these data through interviews and/or surveys during and prior to the field missions	Continuously, Home-based	List of detailed evaluation questions to be clarified; questionnaires/interview guide; logic models; list of key data to collect, draft list of stakeholders to interview during the field missions
Briefing with the UNIDO Evaluation Group, project managers and other key stakeholders over online or phone conference calls.	Continuously, Home-based including during mission to Nepal	Interview notes, detailed evaluation schedule and list of stakeholders to interview during the field missions  Division of evaluation tasks
Prepare inception report and discuss with UNIDO EVA	Up to Week 2 Home-based	Inception report
Conduct field mission to Kathmandu	Week 2 or 3 of the assignment;	Presentations of the evaluation's initial findings, draft conclusions and recommendations to



Main duties	Duration/ location	Deliverables
	Kathmandu, Nepal	stakeholders in Kathmandu at the end of the mission.
		Agreement on the structure and content of the evaluation report
Present overall findings and recommendations to the stakeholders at UNIDO HQ over online and phone conference call	Week 3; Home-based	Presentation slides
Prepare the evaluation report according	Week 4	2 copies Draft evaluation report
to TOR and template provided by UNIDO EVA	Home-based	Brief input report to country evaluation
Coordinate the inputs and combine with her/his own inputs into the draft evaluation report		evaluation
Revise the draft project evaluation reports based on comments from UNIDO Evaluation Group and stakeholders and edit the language and form of the final version according to UNIDO standards	Week 4 (to continue onwards); Home-based	Final evaluation report
TOTAL	30 days	

### Qualifications and skills:

- ✓ Degree in environmental science, development studies or related areas
- ✓ Knowledge of and experience in environmental projects management and/or evaluation
- ✓ Experience in GEF projects and knowledge of UNIDO activities an asset
- ✓ Working experience in developing countries.

Language:

English

#### **Absence of Conflict of Interest:**

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Evaluation Group.

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Annex II

List of project documents and communication

"Environmentally Sound Management and Disposal of POPs Pesticides and PCBs"

MSP Project Document "Environmentally Sound Management and Disposal of POPs Pesticides and PCBs" (GEF SEC PROJECT ID: 3573) on August 25, 2010

UNIDO's response to Germany's comments on "Environmentally Sound Management and Disposal of POPs Pesticides and PCBs" (GEF SEC PROJECT ID: 3573) on August 25, 2010

Communication - GEFSec - Germany - UNIDO - 2010 (rejection of pesticides part from the project)

E-mail communication concerning the project approval and implementation, 2011

Proceedings, First Project Management Technical Committee, March 2011

Report of Inception workshop on Environmentally Sound Management and Disposal of PCBs, March 2011

Project Management (PM) Training, BACK -TO-OFFICE MISSION REPORT, August 2011

A Report on "Awareness raising Workshop on PCBs and PCBs management" in NEA, September 2011

Report on Technical Vendor Consultation Meeting on Environmentally Sound Management and Disposal of PCBs, August 2012

Official letter of UNIDO Regional representative to MOSTE, November 2012

UNIDO Annual Project Implementation Report (PIR), October 2012

E-mail communication - Status of 1st quarter project activities; outline of activiti0es communication (2012 - 2013)

Guidelines For Environmentally Sound Management and Disposal of PCBs, April 2013

Policy Review Report Environmentally Sound Management and Disposal of PCBs, April 2013

PCBs Inventory Surwey Report, Nepal, April 2013



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