
Appendix A5
Final Training Program



Canadian International
Development Agency

Agence canadienne de
développement international



**REGIONAL CAPACITY BUILDING PROGRAM
FOR HEALTH RISK MANAGEMENT
OF PERSISTENT ORGANIC POLLUTANTS (POPs)
IN SOUTH EAST ASIA**

**FINAL NATIONAL TRAINING WORKSHOP
PROGRAM**

**REVISED AFTER CONSULTATION WITH
KEY STAKEHOLDERS IN FOUR PARTICIPATING COUNTRIES**

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NOVEMBER 2008

POP1406



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LIST OF ACRONYMS

CIDA	Canadian International Development Agency
GIS	Geographic Information System
HHRA	Human Health Risk Assessment
HPT	Hatfield POPs Project Team
Lao PDR	Lao People's Democratic Republic
NC	National Consultant
NIP	National Implementation Plan
NFP	National Focal Points for POPs
PCBs	Polychlorinated Biphenyls
PCD	Pollution Control Department (Thailand)
PIP	Project Implementation Plan
POPs	Persistent Organic Pollutants
POPs Project	Regional Capacity Development Program for Management of Health Risks of Persistent Organic Pollutants in South East Asia
PQRA	Preliminary Quantitative Risk Assessment (tool)
PR	Public Relations
QA/QC	Quality Assurance / Quality Control
RA/RM	Risk Assessment/Risk Management
SOPS	Standard Operation Procedures
TOR	Terms of Reference of POPs Project

DISTRIBUTION LIST

The following individuals/firms have received this document:

Name	Firm	Hardcopies	CDs	FTP
Jitendra Shah	World Bank	√	√	√
Catalina Marulanda	World Bank	√	√	√
Manuel Cocco	World Bank	√	√	√
Choviran Ken	NFP Cambodia	√	√	√
Monemany Nhoibouakong	NFP Lao PDR	√	√	√
Che Kodir Bin. Bahrum	NFP Malaysia	√	√	√
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1.0 INTRODUCTION

The Regional Capacity Building Program for Health Risk Management of Persistent Organic Pollutants (POPs) in South East Asia Project, hereafter referred to as the "POPs Project", was developed to complement the National Implementation Plans for the Stockholm Convention on Persistent Organic Pollutants (POPs). Funding for the POPs Project is provided by the Canadian International Development Agency's (CIDA) POPs Fund, and is coordinated by the World Bank. Hatfield Consultants was commissioned by the World Bank to implement the technical components of the Project. Complementary program activities are also implemented by national consultants and World Bank staff.

The POPs Project Health Risk Assessment and Risk Management components have the objective to enhance the capacity of the key government officials and decision makers to apply Risk Assessment (RA), in the setting of Risk Management (RM) strategies, to reduce chemical exposure-related human health risks to an acceptable level.

Task B4 of the POPs Project TOR requires the Project Team to conduct a risk assessment/risk management training workshop in each country. Workshop participants are to be identified by the Project Team (Hatfield and National Consultant) and approved by the respective National Focal Points.

As per the Project TOR, all logistical arrangements will be funded separately by the World Bank. The Project Team is expected to:

- Develop and deliver the training materials;
- Promote participation of the various stakeholders during workshops; and
- Moderate ensuing discussions and interchanges with participants.

The TOR requires the Project Team to submit a training program and samples of training material for review and approval by the World Bank Project Task Team. The training program must outline the training content, format, duration and the audience that should participate in the training program. Training materials are required to include, among others: i) major results from data gathering activities; and ii) the risk management toolkit. Field visits to hot spots are to be incorporated in the training, if required, to better illustrate the use of the toolkit.

Understanding that contributions and inputs from the National Focal Point for POPs in each country was essential to ensure the training program meets the capacity building objectives of the POPs Project, the POPs Project Team and the World Bank conducted a series of consultations with the National Focal Points and other key National Stakeholders in Cambodia, Lao PDR, Malaysia and Thailand. Inputs from each country were obtained during the July-August field sampling mission. Comments from national key stakeholders were collected and

discussed through email exchanges and the discussion board on the POPs Toolkit at www.popstoolkit.com in September and early October, 2008. Dr. Catalina Marulanda, World Bank, visited South East Asia in early October. She visited the National Focal Points and other key stakeholders in participating countries to discuss among other things the draft training program. The current version of the draft Training Program has incorporated all relevant comments and suggestions from the stakeholders obtained through this consultation process. During the mission to Asia, the Project Team also discussed potential involvement of other regionally participating countries - China, Indonesia, the Philippines and Viet Nam - in the national training workshops.

2.0 RATIONALE AND FOCUS

The primary objective of the POPs Project is to enhance the capacity of government agencies in the South East Asia region to manage POPs and POPs-like chemicals using a health risk-based and regional approach.

A significant focus of the capacity building will be on facilitating improved communication and coordination between key Ministries in the areas of risk assessment and management, compliance monitoring and enforcement.

Although significant technical capacity has been developed at both national and provincial levels of government, there is generally still a lack of practical experience, tools, and **collaborative mechanisms** for tackling complex chemical pollution problems in the member countries.

For these reasons, the training program is to be built primarily upon the existing pool of knowledge, and will encourage the creation of collaborative mechanisms for promoting understanding and application of: (1) human health risk assessment and risk management; (2) public accountability and participation; and, (3) result-based monitoring.

The training is intended to provide general knowledge on the risk assessment process and management for POPs, and also to raise awareness of information and tools available on the POPs Toolkit website.

2.1 OTHER ON-GOING CAPACITY BUILDING ACTIVITIES

To date, the Project Team has focused on developing individual capabilities through on-the-job training -'learning by doing'- primarily during field sampling undertaken in all four countries. While focusing its efforts on strengthening capacity of the national agencies concerned, the Project Team also gives equal weight to strengthening accompanying institutional capacities. The Project Team will help to strengthen institutional capacities by working with local consultants and relevant governmental institutions, and to obtain input on training materials and case-studies from each of the four participating countries.

The field sampling program was designed to provide both technical capacity building and on-the-job training in risk assessment and risk management (RA/RM) for POPs to local stakeholders. The field program included both a training seminar and hands-on sampling. Participants received hands-on experience collecting the following data:

- Field samples (environmental and biological samples following internationally accepted Standard Operation Procedures [SOPs]);
- Socio-economic information via questionnaire Survey; and
- Supporting data (e.g., GIS maps, field notes and photographs).

National Consultants have been recruited to work closely with the Project Team and to provide logistical support, to share professional expertise and to create a collaborative mechanism between all parties (including the National Focal Points for POPs and National POPs Team).

The POPs Project also focuses on sharing technical expertise among a broader list of participating countries (e.g., China, Philippines, Indonesia, Vietnam, Japan) through regional workshops, sharing case studies of best practices and informal exchanges of knowledge in the region.

3.0 FORMAT AND DURATION

3.1 TRAINING WORKSHOP FORMAT

The Project Team will coordinate with the national team in each country to ensure that all training materials are ready at least 2 weeks before the training workshop to allow the participants to read them in advance. The Project Team will conduct the training workshops as dynamic interchanges with participants to promote participation of the various stakeholders and encourage productive discussions. Workshops will be conducted in English, with translation to local languages provided (simultaneous translation is preferable).

The training workshops will be complemented by an exposure awareness program to distribute information on ways to reduce exposure to POPs and PTS, as well as potential health risks to high risk people (i.e. workers and their families, and local residents) in the hot spot areas. The details, media and materials for these public awareness campaigns will be discussed and agreed upon with the World Bank, National Focal Points and concerned agencies in advance of the workshop.

The online POPs toolkit (www.popstoolkit.com) will be the repository for all training materials. Where possible, training will be conducted using the online toolkit. Back up on CD-Rom will be provided. The organizer of the training workshop (World Bank) will be requested to arrange at least 15 laptop or desktop computers for the participants to conduct the hands-on application of the risk assessment and risk management decision process tools.

3.1.1 Language

Workshops will be conducted in English, with translation into local languages provided, especially in Lao PDR and Cambodia where English proficiency is relatively lower. The Hatfield Project Team recommends simultaneous translation at each of the workshops planned (Lao PDR, Cambodia, and perhaps Thailand).

Some participating countries recommended having most of the training materials translated into their national languages for use in future national and provincial training programs. Given the huge volumes of training material and limited available budget for translation, the Project Team proposes either:

- Translate only executive summary and glossary of key terms; or
- Look for additional budget from the World Bank, or other sources including national budgets.

3.2 TRAINING STRUCTURE

The risk assessment and risk management training workshop will be conducted in each of the four target countries in January 2009 according to the following schedule:

- Cambodia, January 19 - 21, 2009;
- Malaysia, January 22 - 23, 2009;
- Thailand, January 26 - 27, 2009; and
- Lao PDR, January 28 - 31, 2009.

A combination of hands-on training, lectures, group discussion, brain-storming sessions, and interactive quizzes will be used to raise awareness and understanding among the participants. The training program will include introductions and discussion on relevant risk assessment and risk management theory and methodologies, hands-on application of assessment/management tools and major results from data gathering activities conducted to date.

It is estimated that from 30 to 50 participants from each country will attend the training workshop. Up to three Hatfield team members will conduct the training in each country including Thomas Boivin, Sokhem Pech and Mike Rankin.

3.3 LOCATION

The Project Team consulted with the National Focal Point and concerned officials in each country during the mission to the four countries in July and August 2008, to discuss the proposed location, format and other issues related to the organization and content of the National Training Workshops.

The following locations were proposed by the countries:

- Siem Reap, Cambodia;
- Putrajaya, Malaysia;
- Hua Hin, Thailand; and
- Vientiane, Lao PDR.

3.4 CERTIFICATE OF TRAINING

In recognition of the successful completion of the training program, the training workshop organizer – the World Bank – will present the participants with Certificate of Completion of the RA/RM Training.

4.0 CONTENT OF RISK ASSESSMENT/RISK MANAGEMENT NATIONAL TRAINING WORKSHOPS

While the national training workshop will be customized to each country's needs, the technical training will introduce to the participants the key features, content and 6 training modules present in the POPs toolkit. These modules are split into a number of training components as follows:

1. *General Background on POPs* – Chemistry, human health effects, assessment, management and mitigation
2. *POPs Data Gathering and Management Techniques Modules*
 - 2.1 Assessing and Evaluating Available Data from selected hot spots
 - 2.2 Sources of existing data (photographs, site history, chemistry, etc.)
 - 2.2.1 Approaches for assessing existing data quality (e.g., field records, use of SOPs, review of field QA/QC data, review of laboratory QA/QC data etc...)
 - 2.2.2 Lessons learned
 - 2.3 Data gap analysis (i.e., data needs for the Site Prioritization Tool, Problem Formulation and Risk Assessment)
 - 2.4 Introduction to Field Data Sampling and Analysis Standard Operation Procedures (SOPs): Objectives, General Principles, and Field Sampling Organization, General Sample Collection and Analysis, QA/QC, Demobilization
 - 2.5 Sampling Methodologies for key environment matrices: soil, sediments, and tissues, human health sampling (blood/breast-milk) and field data forms

- 2.6 Guide to GPS Field Data
- 2.7 Lessons learned from Supplementary Field Data Collection
- 2.8 Human Exposure Survey
 - 2.8.1 Rationale and approach
 - 2.8.2 Implementation
 - 2.8.3 Analysis
 - 2.8.4 Lessons learned
- 3. **Site Prioritization Module**
 - 3.1 Introduction to Site Prioritization Framework and Tools
 - 3.2 Theory (when to assess risk, when to clean up - i.e., risk vs. hazard)
 - 3.2.1 Methodology and Data requirements
 - 3.2.2 Hands-on tutorial on how to use the site prioritization tool
- 4. **Human Health Risk Assessment Module**
 - 4.1 Introduction to Human Health Risk Assessment framework
 - 4.1.1 Risk Assessment Concepts - Contamination, Exposure Pathways and Receptors
 - 4.1.2 Influence of Chemical Life Cycle Stage
 - 4.2 Problem formulation
 - 4.3 Exposure analysis
 - 4.4 Toxicity analysis
 - 4.5 Risk characterization
 - 4.5.1 Risk estimation
 - 4.5.2 Risk interpretation
 - 4.6 Preliminary Quantitative Risk Assessment (PQRA) Tool
 - 4.6.1 Methodology
 - 4.6.2 Data requirements
 - 4.6.3 Hands-on tutorial on how to use the PQRA tool
 - 4.7 Case study results-to-date
- 5. **Economic Analysis Module**

- 5.1 Approach for Valuation of Human Health Costs
- 5.2 Approach for Comparison with Cost of Remediation Measures
- 5.3 Approach for Quantitative Assessment of Other POPs Impacts
- 5.4 Case study results-to-date

6. **Human Health Risk Management Module**

- 6.1 Risk Management Decision-Making Process
 - 6.1.1 Situation Evaluation and Development of Problem Statement
 - 6.1.2 Development of Risk Management Goals, Sub-goals and Indicators
 - 6.1.3 Collaborative Development and Evaluation of Proposed Risk Management Options
 - 6.1.4 Risk Communication – Sensitization and Mainstreaming of Management Options
 - 6.1.5 Monitoring and Evaluation of Management Impacts

5.0 PROPOSED TRAINING SCHEDULE

At the request of the National Focal Point and concerned officials in each country, the training workshop will be conducted for 1.5 days in Malaysia, 2 days in Thailand, 2.5 days in Cambodia, and 3.5 days in Lao PDR. The training schedule for each country is provided in **Appendix A.1**.

6.0 AUDIENCE

Task B3: Identification of stakeholders in the terms of reference (TOR) require the Project Team to propose groups of stakeholders in relevant government agencies that should participate in national and regional training planned as part of the POPs Project. The Stakeholder Identification and Analysis Plan was developed and submitted to the World Bank and National Focal Points for comments together with the Progress Report 1 in May 2008.

The stakeholder identification is based primarily on the review of the NIP. It is recommended that stakeholders in government agencies, relevant private sector companies, NGOs and academia with interests and/or involvement in POPs/chemical management take part in various project activities, including the national training workshop.

Based on the communication plan matrix and a review of stakeholder groups (Draft Progress Report 1, May 2008), the Project Team recommends the World

Bank and the National Focal Points invite and support the participation of the representatives from the following agencies and organizations to the national training workshop. The lists of the participants were revised following the comments from the National Focal Points in all four participating countries. The lists are provided in **Appendix A.2**.

7.0 KEY POINTS FOR CONSIDERATION

7.1 ASSISTANCE REQUIRED FROM NATIONAL FOCAL POINT

The Hatfield Project Team requested the support and assistance from the National Focal Point in each country with the following:

1. To get official approval for conducting the National Training Workshop;
2. Invite relevant participants to attend the training workshop;
3. Provide list of participants and alternates to World Bank as soon as possible (but well before the training workshop for proper logistical arrangements);
4. Invite high level government officials;
5. Provide opening remarks by the high level government official;
6. Write preface or brief introduction (English and National Language) for inclusion in training material;
7. Contribute to development of training materials (case study, lesson learned from field sampling etc);
8. Present a presentation at the training workshop on POPs issues and management in your country;
9. Work with the project team in developing a case study of the selected site and Present it at the training workshop;
10. Encourage active usage of www.popstoolkit.com;
11. Provide World Bank with list of activities for dissemination/ outreach /PR;
12. Provide any suggestions for awareness raising or other workshops to be conducted by NFPs; and
13. Send World Bank 3 quotes for hotel and translation.

7.2 ASSISTANCE REQUIRED FROM WORLD BANK

The Hatfield Project Team requested the support and assistance from the World Bank POPs Project Task Team with the following:

1. Approving the Training Program, outline and approach, as well as the samples of training material now available at www.popstoolkit.com;
2. Sending letter to all NFPs to formally request holding the National Training Workshop on date specified (by November 20, 2008);
3. Providing all logistical arrangements as agreed in the Project TOR;
4. Arranging at least 15 lap-top or desktop computers for the participants to conduct the hand-on application of the risk assessment and risk management decision process tools, as well as to familiarize themselves with the online POPs toolkit; and
5. Providing translation (English and participating country's official languages).

8.0 CLOSURE

The Training Program presented here is an outcome of an intensive consultation process with key stakeholders – The World Bank, National Focal Points and other key stakeholders in Cambodia, Lao PDR, Malaysia and Thailand. We trust the above information meets your requirements. If you have any questions or comments, please contact the undersigned.

HATFIELD CONSULTANTS:

Approved by:	_____	November 14, 2008
	Sokhem Pech, Project Manager	Date

Approved by:	_____	November 14, 2008
	Thomas Boivin, Project Director	Date

APPENDICES

Appendix A1

**Detailed Training Workshop
Schedules and Responsibility
Assignment**

Appendix A1.1 Cambodia's Detailed Training Schedule and Responsibility Assignment

Day I: January 19, 2009

Time	Task and Sub task	Responsible by
08.00 – 08.15	Opening of Training Workshop and Welcome	Host Ministry & WB
08.15 – 08.45	Key objectives of the training and background on POPs.	Thomas B.
08.45 – 09.15	National Presentation on POPs Issues in country and at selected study site under POPs Project.	National Focal Point
09.15 – 10.00	Introduction to the POPs Toolkit	Thomas B.
10.00 – 10.30	Group Photo & Coffee Break	
10.30 – 11.30	Human Health Hazard and Risk Assessment: Theory and Approach	Mike R. W
11.30 – 12.30	Site Prioritization Tool - Overview	Mike R.
12.00 – 13.30	Lunch Break	
13.30 – 15.00	Hands-on application of Site Prioritization Tool	All participants, facilitated by Mike R., Thomas B.
15.00 – 15.15	Coffee Break	
15.15 – 16.30	Problem Formulation, Exposure Analysis, Toxicity Analysis, Risk Estimation and Characterization	Mike R.
16.30 – 17.30	Discussion	All participants, facilitated by Thomas Boivin
18.30 – 20.30	Reception Dinner hosted by the World Bank: <ul style="list-style-type: none"> ▪ Presentations and photo-slice show by National Participants on lessons learned from field sampling at the selected site "Sambour Site". 	World Bank National Consultant.

Day II: January 20, 2009

Time	Task and Sub-tasks	Responsible by
08.00 – 08.30	Feedback and Recap of Day I	Sokhem P.
08.30 – 10.00	Presentation and Discussion: EDC Sambour Case Study.	National Focal Point and National Consultant
10.00 – 10.30	Coffee	
10.30 – 12.00	Introduction to Preliminary Quantitative Risk Assessment (PQRA) Tool	Mike R.
12.00 – 12.30	General Discussion	All participants Facilitated by

		Sokhem P. and National Consultant
12:30 – 13.30	Lunch Break	
13.30 – 15.00	Hands-on application of PQRA Tool	Mike R.
15.00 – 15.45	Discussion on findings from Application of PQRA	All participants Facilitated by Thomas B. and National Consultant
15.45 – 16.00	Coffee Break	
16.00 – 17.00	Introduction to Economic Analysis Training Module	Thomas B.
18.30 – 20.30	Dinner Hosted by Hatfield	All participants

Day III: January 21, 2009

Time	Task and Sub-tasks	Responsible by
08.00 – 08.15	Feedback and Recap of Day I	Thomas Boivin
08.15 – 09.15	Introduction to Risk Management Decision-Making process	Sokhem P.
09.15 – 11.15	Group work/discussion on application of: 1) developing risk management goals, sub-goals (objectives), and indicators; 2) long-listing and short-listing of management options (developing selection criteria, weighting factors, management options)	Sokhem P. or Thomas B. and all participants (using Sambour case study) (coffee is served)
11.15 – 12.15	Presentation and General Discussion on group discussions on risk management of Sambour Site.	Groups leaders and all participants, Facilitated by National Consultant.
12.15 – 12.30	Wrap-up and closing/Training Evaluation	World Bank and Host Ministry
AFTERNOON	Participants return home	

Appendix A1.2 Malaysia's Detailed Training Schedule and Responsibility Assignment

Day I: January 22, 2009

Time	Task and Sub task	Responsible by
08.00 – 08.15	Opening of Training Workshop and Welcome	Host Ministry & WB
08.15 – 08.30	Key objectives of the training and background on POPs	Thomas B.
08.45 – 09.15	National Presentation on POPs Issues in country and at selected study site under POPs Project	National Focal Point
09.15 – 10.15	Introduction to the POPs Toolkit	Thomas B.
10.15 – 10.30	Group Photo & Coffee Break	
10.30 – 11.10	Human Health Hazard and Risk Assessment: Theory and Approach	Mike R. W
11.10 – 11.30	Site Prioritization Tool - Overview	Mike R.
11.30 – 12.30	Hands-on application of Site Prioritization Tool	Mike R.
12.30 – 13.30	Lunch Break	
13.30 – 14.30	Problem Formulation, Exposure Analysis, Toxicity Analysis, Risk Estimation and Characterization	Mike R.
14.30 – 15.30	Discussion	All participants Facilitated by Mike R. and National Consultant
15.30 – 15.45	Coffee Break	
15.45 – 16.45	Presentation and Discussion: Country Case Study Results to date	National Consultant and National Focal Point
16.45 – 17.30	Introduction to Preliminary Quantitative Risk Assessment (PQRA) Tool	Mike R. W
18.30 – 20.30	Reception Dinner hosted by the World Bank: <ul style="list-style-type: none"> ▪ Presentations and photo-slice show by National Participants on lessons learned from field sampling at the selected site "AHSL". 	World Bank National Consultant

Day II: January 23, 2009

Time	Task and Sub-tasks	Responsible by
08.00 – 08.30	Feedback and Recap of Day I	by National Consultant and Sokhem P.
08.30 – 09.00	Discussion and application of PQRA Tool	All participants,

		facilitated by Mike R. and Thomas B.
09.00 - 09.30	Introduction to Economic Analysis Training Module	Thomas B.
09.30 - 09.45	Coffee Break	
09.45 - 10.15	Introduction to Risk Management Decision-Making process	Sokhem P.
10.15 - 12.00	Group work/discussion on application of: 1) developing risk management goals, sub-goals (objectives), and indicators; 2) long-listing and short-listing of management options (developing selection criteria, weighting factors, management options)	All participants, facilitated by Thomas B. and Sokhem P. (using AHSL case study)
12.00 - 12.30	Wrap-up and closing/Training Evaluation	World Bank and Host Ministry
12.30	Lunch	

Appendix A1.3 Thailand's Detailed Training Schedule and Responsibility Assignment

Day I: January 26, 2009

Time	Task and Sub task	Responsible by
08.00 – 08.15	Opening of Training Workshop and Welcome	Host Ministry & WB
08.15 – 08.45	Key objectives of the training and background on POPs	Thomas B.
08.45 – 09.15	National Presentation on POPs Issues in country and at selected study site under POPs Project	National Focal Point
09.15 – 10.00	Introduction to the POPs Toolkit	Thomas B.
10.00 – 10.30	Group Photo & Coffee Break	
10.30 – 11.10	Human Health Hazard and Risk Assessment: Theory and Approach	Mike R. W
11.10 – 12.00	Site Prioritization Tool - Overview	Mike R.
12.00 – 13.00	Lunch Break	
13.00 – 15.00	Hands-on application of Site Prioritization Tool	All participants, facilitated by Mike R.
15.00 – 15.15	Coffee Break	
15.15 – 16.30	Problem Formulation, Exposure Analysis, Toxicity Analysis, Risk Estimation and Characterization	Mike R.
16.30 – 17.30	Discussion	All participants, facilitated by Mike R. and National Consultant
18.30 – 20.30	Reception Dinner hosted by the World Bank: <ul style="list-style-type: none"> ▪ Brief presentations by National Participants on lessons learned from field sampling at the hot spot in each country 	World Bank; National Consultant

Day II: January 27, 2009

Time	Task and Sub-tasks	Responsible by
08.00 – 08.30	Feedback and Recap of Day I	Facilitated by National Consultant
08.30 – 09.45	Presentation and Discussion: Country Case Study Results to date	National Consultant and National Focal Point
09.45 – 10.30	Introduction to Preliminary Quantitative Risk Assessment (PQRA) Tool	Mike R. W
10.30 – 10.45	Coffee Break	
10.45 – 12.00	Hands-on application of PQRA Tool	All participants,

		facilitated by Mike R. and Thomas B.
12.00 - 12.30	Discussion on findings from Application of PQRA	Facilitated by Mike R. and Thomas B.
12.30 - 13.30	Lunch Break	
13.30 - 14.15	Introduction to Economic Analysis Training Module	Thomas B.
14.15 - 15.15	Introduction to Risk Management Decision-Making process	Sokhem P.
15.15 - 17.15	Group work/discussion on application of: 1) developing risk management goals, sub-goals (objectives), and indicators; 2) long-listing and short-listing of management options (developing selection criteria, weighting factors, management options)	All participants, facilitated by National Consultant, Thomas Boivin, (using MEA Facility case study) (coffee is served)
17.15 - 17.30	Wrap-up and closing/Training Evaluation	World Bank and Host Ministry
18.30 - 20.30	Dinner Hosted by Hatfield	For all participants

Appendix A1.4 Laos's Detailed Training Schedule and Responsibility Assignment

Day I: January 28, 2009

Time	Task and Sub task	Responsible by
08.00 – 08.15	Opening of Training Workshop and Welcome	Host Ministry & WB
08.15 – 08.45	Key objectives of the training and background on POPs.	Thomas B.
08.45 – 09.15	National Presentation on POPs Issues in country and at selected study site under POPs Project.	National Focal Point
09.15 – 10.00	Introduction to the POPs Toolkit	Thomas B.
10.00 – 10.30	Group Photo & Coffee Break	
10.30 – 11.30	Human Health Hazard and Risk Assessment: Theory and Approach	Mike R. W
11.30 – 12.30	Site Prioritization Tool - Overview	Mike R.
12.00 – 13.30	Lunch Break	
13.30 – 15.00	Hands-on application of Site Prioritization Tool	All participants, facilitated by Mike R.
15.00 – 15.15	Coffee Break	
15.15 – 16.30	Problem Formulation, Exposure Analysis, Toxicity Analysis, Risk Estimation and Characterization	Mike R
16.30 – 17.30	Discussion	All participants, facilitated by Thomas Boivin
18.30 – 20.30	Reception Dinner hosted by the World Bank: <ul style="list-style-type: none"> ▪ Brief presentations by National Participants on lessons learned from field sampling at the hot spot in each country 	World Bank; National Consultant

Day II: January 29, 2009

Time	Task and Sub-tasks	Responsible by
08.30 – 08.50	Feedback and Recap of Day I	Sokhem P.
08.30 – 09.30	Presentation on EDL Sokpalouang Case Case Study.	National Focal Point and National Consultant (NC)
09.30 – 10.15	Discussion on EDL Sokpalouang Case Case Study.	All participants, facilitated by NC, Thomas B.
10.00 – 10.30	Coffee	
10.30 – 11.45	Introduction to Preliminary Quantitative Risk Assessment (PQRA) Tool	Mike R.

11.45 - 12.30	General Discussion	All participants Facilitated by Thomas B. and NC
12:30 - 13:30	Lunch Break	
13:30 - 15.30	Hands-on application of PQRA Tool	All participants Facilitated by Mike R., Thomas B. and NC.
15.30 - 15.45	Coffee Break	
15.45 - 16.45	Discussion on findings from Application of PQRA	All participants Facilitated by Thomas B. and NC

Day III: January 30, 2009

Time	Task and Sub-tasks	Responsible by
08.30 - 08.50	Feedback and Recap of Day I	Sokhem P.
08.50 - 09.50	Introduction to Economic Analysis Training Module	Thomas B.
09.50 - 10.30	General Discussion on Economic Valuation and Risk Management in Laos Context	All participants, facilitated by Thomas B., Sokhem P., Mike R.
10.30 - 10.45	Coffee Break	
10.45 - 11.45	Introduction to Risk Management Decision-Making process	Sokhem P.
11.45 - 12.30	Question and Answer Session	All participants, facilitated by Thomas B.
12.30 - 14.00	Lunch Break	
14.00 - 16.00	Group work/discussion on application of: 1) developing risk management goals, sub-goals (objectives), and indicators; 2) long-listing and short-listing of management options (developing selection criteria, weighting factors, management options)	All participants, facilitated by Thomas B., Sokhem P., Mike R., and NC. (using case study)
16.00 - 16.15	Coffee Break	
16.15 - 17.00	Presentation and General Discussion on group discussions on risk management of Sokpalouang Site.	Groups leaders and all participants, Facilitated by National Consultant.
17.00 - 17.30	Wrap-up and closing/Training Evaluation	World Bank and Host Ministry
18.30 - 20.30	Dinner Hosted by Hatfield	All participants

Day IV: January 31, 2009

Time	Task and Sub-tasks	Responsible by
08.30 - 12.00	Field visit and meeting with community	National Focal Point, NC.
12.00 - 13.30	Lunch Break	

Appendix A2

Lists of Participants

Appendix A.2.1 Draft List of Cambodian Participants

Ministry/ Organization	Concerned Entities	Number and Level of Participants
Ministry of Environment	Minister/Vice Minister	2 (for opening and closing)
	Department of Environmental Pollution Control	4 people at management and technical level + Laboratory
	Environmental Education and Communication Department	2 (risk communication official)
	Natural Resources Assessment and Environmental Data Management Department (GIS Office)	1 (GIS Office)
Ministry of Agriculture, Forestry and Fishery	Dept. Agronomy & Agricultural Land Improvement (DAALI)	2 people at management and technical level (pesticides)
	Department of Agricultural Extension Services	1 planning and outreach official
Ministry of Public Health	National Center For Malaria Control, Parasitology and Entomology (NCMP&E)	2 (POPs management)
	Communicable Disease Control (CDC)	2 (health risk)
Ministry of Industry, Mine and Energy	Électricité du Cambodge (EDC)	2 (public relation and POPs management)
	EDC Sambour Warehouse and Vocational Training School, Sambour	2 (Lecturer and site manager)
	EDC Chak Angre Repair Workshop	2 (manager and transformer repairman)
	Private Power Producers	2 (manager & transformer repairman)
Ministry of Finance	National Budget Dept (MOF)	1 (financial planning)
	Customs Department (MOF)	1 (import inspector)
Commerce Ministry	CAMCONTROL Department (MOC)	2 (Laboratory and inspection)
Local Authority	Phnom Penh Municipality	2 (Waste Management)
	Sihanoukville Municipality	1 (solid waste or chemical)
University	Royal Agriculture University	2 (Agriculture chemicals)
	Faculty of Medicine	1 (Health Risk)
	Royal University of Phnom Penh	1 (environment science department)
NGOs	NGOs Forum on Cambodia	1 (environment coordinator)
	Mlup Baitong	1 (Media officer)
	CEDAC	2 (agricultural chemicals)
	CTN Television	1 (Reporter)
	TVK (National Television)	1 (ASEAN Unit Reporter)
	Media Press Association	1 (Director)
	Raksmeay Cambodia Newspaper	1 (News maker)

Total Cambodian participants = 43 (not included WB + Hatfield+ observers)

Appendix A.2.2 Draft List of Lao PDR Participants

Ministry/ Organization	Concerned Entities	Number and Level of Participants
Water Resources and Environment Administration	Minister/vice Minister	(for opening)
	Environment Research Institute (ERI)	3 people at management and technical level
	Dept of Environment, EIA division, WR&E Research Institute, and Cabinet of WREA	7
WREA Provincial Offices	Water Resources and Environment Office (WREO) 2 persons x 17 provinces	17
Ministry of Foreign Affairs	Cooperation Dept	1
Ministry of Agriculture	Department of Agriculture (DOA)	1
Ministry of Planning and Investment	Dept of Investment, and Dept of Planning and Cooperation	2
Defense Ministry	Chemical Department	2 (POPs management)
Health Ministry	Department of Health	1 (POPs management and health risk)
	Vientiane Hospital 103	1
Ministry of Industry and Commerce	Environment Factory Unit, Clean Production Unit, and International Trade Dept.	2
	EDL, Environmental Unit, and Sokpalouang Repair Workshop	2
Ministry of Public Work and Transport	Dept of Transport	1
Ministry of Labour and Social Welfare	Labor Dept.	1
Ministry of Finance	Custom Department	1 (import inspector)
Ministry of Information and Culture	Communication Dept	1
National Authority of Science and Technology	Information Technology Institute	1
Vientiane Urban Development Authority	Environment Division	1
Mass Organizations	Lao Youth Union	1
	Central Laos Women's Union	1
	Women Union	1
NGO	UXO (Demining and Dioxin)	1
National University of Laos	Faculty of Chemistry, and Center for Environment and Development	2 (Chemical management and health risk)

Total Laos participants = 50 (not included WB + Hatfield+ observers) Now reduces to 50 following Tom and Manuel meeting with ERI on 28 Nov 2008

Appendix A.2.3 Draft List of Malaysian Participants

Ministry/ Organization	Concerned Entities	Number and Level of Participants
MONRE	Conservation & Environmental Management Division (CEMD)	2 (policy and regulation)
	Department of Environment (DOE)	5 (risk communication, planning, hazardous waste management.)
Ministry of Health (MOH)		2 (health risk & risk communication)
	Local Health related agencies	3 at management and technical level
	Drug Control Authority (DCA)	1 (Public health and chemical management)
Ministry of Agriculture	Pesticide Board	3
	Department of Standard	1
Ministry of Foreign Affairs	National Authority for Chemical Weapon Convention	1
SIRIM	Standards and Industrial Research Institute of Malaysia	2
Ministry of Housing and Local Government		2
	National Solid Waste Management Department	2
Ministry of Finance (MOF)	Royal Malaysian Custom	2
Ministry of International Trade and Industry		1
Ministry of Human Resources Malaysia	Dept. of Occupational Safety and Health	3
	National Institute of Occupational Safety and Health (NIOSH)	2 (Training and risk communicator)
University	Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia (UKM)	3 (national consultants)
	Other universities	3
National Doping Center		1
National Poison Center		1
Others		5

Total Malaysian participants = 45 (not included WB + Hatfield)

Appendix A.2.4 Draft List of Thailand Participants

Ministry/ Organization	Concerned Entities	Number and Level of Participants
MONRE	Pollution Control Department (PCD)	8 (Chemical management, risk assessment, capacity building)
	Department of Environmental Quality Promotion (DEQP)	2 (risk communication official, planning, hazard waste management.
	Office of the Natural Resources and Environmental Policy and Planning (NREPP)	2 (chemical management and planning)
Min of Industry	Department of Industrial Works (DIW)	3 (Chemical management, risk assessment, capacity building)
	Hazardous Substance Committee	1 (Hazardous substance)
Ministry of Health (MOH)	Department of Health	3 (health risk management and risk communication)
Ministry of Agriculture	Department of Agriculture	3 (POPs management)
	Department of Agriculture Extension (DoAE)	2 (Education and public awareness)
Ministry of Finance (MOF)	Finance/National Budget	1 (finance/ budgeting)
	Customs Department	1 (import inspector)
Min of Interior	Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA)	2 persons(POPs related staff and risk management staff)
	Electricity Generating Authority of Thailand (EGAT)	2 persons(POPs related staff and risk management staff)
	Energy Policy and Planning Office (EPPO)	1 person (Planning)
	Department of Local Administration (DLA) and Department of Provincial Administration (DPA)	2 person (risk management and communication)
	Bangkok Municipality Authority (BMA)	1 (risk management and communication)
	University	1 (chemical management)

Total Thailand participants = 35 (not included WB + Hatfield+ observers)