

## Terminal Evaluation Review form, GEF Evaluation Office, APR 2013

### 1. Project Data

Summary project data			
GEF project ID		2875	
GEF Agency project ID		GF/MCD/08/002	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		UNIDO	
Project name		Demonstration project for Phasing-out and Elimination of PCBs and PCB-Containing Equipment	
Country/Countries		The Former Yugoslav Republic of Macedonia (FYROM)	
Region		Europe and Central Asia	
Focal area		POPs	
Operational Program or Strategic Priorities/Objectives		OP14, POPS-2; POPS-1	
Executing agencies involved		Ministry of Environment and Physical Planning (MEPP)	
NGOs/CBOs involvement		None	
Private sector involvement		One of the beneficiaries and member of the project steering committee: national host company for PCBs	
CEO Endorsement (FSP) /Approval date (MSP)		2008-07-02 (PMIS), PPG Approval: 2006—02-07	
Effectiveness date / project start		2008-07 / 2008-09-23	
Expected date of project completion (at start)		2011-08	
Actual date of project completion		2013-11	
Project Financing			
		At Endorsement (US \$M)	At Completion (US \$M)
Project Preparation Grant	GEF funding	0.043	0.043
	Co-financing	0.01	0.0
GEF Project Grant		0.957	0.957
Co-financing	IA/EA own	0.02	0.0
	Government	0.770	0.770
	Other*	0.995	1.245
Total GEF funding		1.0	1.0
Total Co-financing		1.795	2.015
Total project funding (GEF grant(s) + co-financing)		2.795	3.015
Terminal evaluation/review information			
TE completion date		2013-11	
TE submission date		11/1/2013	
Author of TE		Iva Bernhardt	
TER completion date		2014-03-17	
TER prepared by		Kseniya Temnenko, GEF IEO	
TER peer review by (if GEF EO review)		Joshua Schneck	

\*Includes contributions mobilized for the project from other multilateral agencies, bilateral development, cooperation agencies, NGOs, the private sector, and beneficiaries.

## 2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	S	HS	HS	S
Sustainability of Outcomes	ML	ML	ML	ML
M&E Design	S	S	S	MS
M&E Implementation	S	S	MS	MS
Quality of Implementation	S	S	S	S
Quality of Execution	S	HS	HS	S
Quality of the Terminal Evaluation Report	n/a	n/a	S	S

## 3. Project Objectives

### 3.1 Global Environmental Objectives of the project:

Reduce and eliminate the threats to human health and the environment posed by PCBs in the FYR of Macedonia by establishing an environmentally sound management (ESM) system for phasing out 25 transformers in most critical condition identified by the inventory and disposal of 150 tons PCB-containing wastes in the upgraded interim storage and decontamination facility in an environmentally sound manner. The environmentally sound management system for disposal of PCBs and PCB-containing equipment should include legislation, institutional and technical capacity building, awareness raising and assisting in the phase-out process of PCB-containing equipment from the selected demonstration areas.

### 3.2 Development Objectives of the project:

Strengthened countrywide capacity for PCB management, financial mechanism for PCB management, compliance with the Stockholm Convention obligations related to PCBs, increased public awareness along with well-trained technical personnel involved in PCB management and improved cooperation among key stakeholders, government, public and private enterprises involved in PCB management.

### 3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

Yes. First, There was a major delay of 22 months in building the interim storage and decontamination facility due to late selecting Best Available Technologies (BAT). The Request for extension of project milestones was submitted on 04.10.10

Second, there was no training in fundraising done. According to TE it did not jeopardize the project outcomes.

Third, the project did not involve NGOs in public awareness activities, as there were no specialized NGOs for dangerous chemicals and hazardous wastes. According to TE, from the early stages of the project implementation, it was known that there were no relevant NGOs, but it was not mentioned in the MTR or any other documents prior to TE.

#### 4. GEF EO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

<b>4.1 Relevance</b>	Rating: <b>Satisfactory</b>
<p>The project aimed to build a sustainable ESM system to support phasing-out and disposal of PCB-containing electrical equipment Project outcomes were consistent with GEF Strategic Objectives as outlined in the POPs Focal Area Strategy and Strategic Programming for GEF-4, including the GEF long-term objective to reduce and eliminate production, use, and releases of POPs; the Strategic Program#1 on strengthening capacity for National Implementation Plan (NIP) Development; the Strategic Program#2 on Partnering in Investments for NIP Implementation. The outcomes were also relevant to GEF Operational Program OP14, including its main objective to provide assistance to reduce and eliminate releases of POPs into environment. In addition, the project objectives and outcomes were consistent with the FYROM's stated national goals. This is evidenced by the FYR of Macedonia signing of the Stockholm Convention in 2001. The project's outcomes were also in line with priorities of the National Implementation Plan adopted by the Government in 2005, namely detailed inventory of POPs chemicals, preventing uncontrolled waste combustion, PCB-containing waste management, preparation of new and amendment of existing legislation, public awareness and education.</p>	
<b>4.2 Effectiveness</b>	Rating: <b>Satisfactory</b>

The project achieved majority of outcomes as described in the project document.

1. Establishment of an environmentally sound management system. The project achieved significant outcomes in building technical capacity for PCBs management. Namely, it produced guidelines and procedures for identifying PCB-containing equipment, methodology for labeling, procedures for collecting the PCB-containing equipment and wastes, procedures for draining PCB contaminated oils and its treatment. In 2008 the project published a Brochure "Guidelines for Identification of PCB in electrical equipment", and in 2010 it published the "Handbook on Environmentally Sound PCB Management of electrical equipment". A central database based on a national inventory was developed and is updated with the phasing out of each PCB-containing transformer. (TE, p. 33)

On the other hand, there is no information about improvement of legal framework for PCB management and disposal, including amendments of laws and regulations. TE does not include any related outcomes. (TE, pp.30—32)

The project has also identified the BAT for disposal options – the non-combustion and decontamination technology, and developed a National Action plan for PCB management. The latter was prepared with almost two year delay due to delays in identification of BAT. (TE, p.33)

2. Implementation of an environmentally sound management system in selected demonstration areas.

The project organized a national workshop for inventory and a training workshop for environmentally sound management for all stakeholders, including for PCB-owner companies. All selected demonstration areas have identified and labeled PCB-containing equipment, developed detailed inventory and conducted testing of oil samples as planned. (TE, p. 34-35)

3. Upgraded storage facility and disposal option implemented.

The project built the PCB storage facility that meets ESM principles for environmentally sound safe storage for PCB wastes, trained personnel, and established a monitoring system. One hundred and twenty four transformers (167.25 tons of PCB-containing equipment and wastes) were decontaminated which is above initially planned 25 transformers and 150 tons of PCB-containing waste. However, according to TE four companies in two PCB demonstration areas did not phase out their transformers due to lack of funding. (TE, p.34-38)

4. Capacity building to secure financial sustainability.

According to TE sufficient capacity has been strengthened which is manifested in the amount of project co-financing raised by MoEPP. No formal training on fundraising has been organized. (TE, p.39)

5. Public participation and awareness rising.

The project organized awareness raising activities as planned, however public hearing and NGO involvement activities did not happen. According to TE, there were no specialized NGOs for dangerous chemicals in Macedonia to collaborate with. (TE, p.40)

The effectiveness is rated as satisfactory, as most outcomes were achieved as planned, however some outcomes (changes and updates in the legal framework and public participation and NGO involvement) were not.

4.3 <b>Efficiency</b>	Rating: <b>Satisfactory</b>
-----------------------	-----------------------------

According to TE, every effort was made to implement the project in a cost-effective manner. Especially, the project introduced to the country the least-cost technological option for non-combustion and decontamination. On the other hand, the attainment of project outcomes was negatively affected by a

two-year delay in implementation. The satisfactory rating is justified because the project managed to achieve majority of intended outcomes without an increase in costs despite the delay.

4.4 Sustainability	Rating: <b>Moderately Likely</b>
--------------------	----------------------------------

The chief risk to project sustainability is a financial one. Although the government of FYR Macedonia has contributed significant co-financing resources into the project, and the National Waste Management Plan identified options for sustainable financing for waste management, the private companies (PCB-equipment owners) have to secure financing to cleaning of the remaining PCB-containing equipment. It is unclear whether they will be able to find sufficient resource to do so and phase out all remaining PCB-containing equipment by 2017 as required by law. (MTE, pp 30-31; TE p. 48). The other potential risk is sustainability of capacity built on the individual level. The project trained and raised awareness of about 100 persons, but it does not contain plans on how such efforts will be sustained as more people may need to be trained in the elements of ESM due to staff changes. (TE p.48)

## 5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

According to TE, the project has achieved higher than expected levels of co-financing. The increase was achieved by the raise in in-kind co-financing provided by the host organization for the PCB-decontamination unit and by the owners of PCB-owner companies in new demonstration areas. The MTE provides opinions of representatives of the host organization and PCB-owner companies that, they had to increase co-financing because the project budget should have been estimated higher from the beginning. Also, according to MTE, the host organization had to take a bank loan to build the storage facility because of the delays in the project. (TE, p. 47, MTE, p. 28-29)

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project received a no-cost 22 -months extension due to delays in selecting the best available technology of decontamination, as well as delays in obtaining municipal permits for construction of the decontamination facility. The delay did not affect achievement of project outcomes, but as stated above, it may have put an additional pressure on local private companies. (MTE p.26, TE p. 47)

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

According to TE, the project had a very high level of country ownership, as it was demonstrated by the relevance of the project to national priorities and plans, the role of MoEPP as the national executing agency, participation of government institutions and beneficiaries in the Project Steering Committee, and co-financing obtained. (TE, p.52)

## 6. Assessment of project’s Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

<b>6.1 M&amp;E Design at entry</b>	Rating: <b>Moderately Satisfactory</b>
------------------------------------	--

The project design included M&E plan, logical framework, outlined responsibilities for monitoring and evaluation, allocated budget for M&E activities, and called for mid-term review, field visits by UNIDO, and the final evaluation. The project also monitored building of the new facility, the installation of new technology, and the decontamination process. On the other hand, it lacked SMART indicators and targets, and could not establish a proper baseline for significant number of project components. Especially, projects components related to amendments of legislation, implementation of the ESM system, capacity building, and public awareness activities could have benefited from better-focused SMART indicators. According to TE, the most important key impact technical indicator (removal of 150 tons of PCB-containing equipment) was set up correctly. (TE, p. 49)

<b>6.2 M&amp;E Implementation</b>	Rating: <b>Moderately Satisfactory</b>
-----------------------------------	--

The project used regular progress reports as a way to track and report on project activities and connect them to intended outcomes. On the other hand, as specified above, the M&E plan at the design stage had some shortcomings, which also affected implementation of M&E plans. According to TE, there is no evidence that M&E plans were changed or updated after the inception workshop or during the first year of the project implementation. None of the planned annual reviews were conducted. The mid-term review was delayed for two years due to delays in project implementation. The terminal evaluation was undertaken at the end of the project as mandated. (TE, p.49)

## 7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in

performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

<b>7.1 Quality of Project Implementation</b>	Rating: <b>Satisfactory</b>
--	-----------------------------

The project design had shortcomings in its logical framework, M&E plan, and outcome indicators. The logical framework was not clarified during the project inception workshop as initially planned in the PD. The Agency project manager provided assistance, especially during the choosing of the best available technology, building of the storage facility, installing of the technology, and during the decontamination process. However, UNIDO failed to address important process issues related to choosing of the best available technology that led to delay of two years.

<b>7.2 Quality of Project Execution</b>	Rating: <b>Satisfactory</b>
---	-----------------------------

Quality of execution is rated as satisfactory as most intended outcomes have been achieved as planned. On the other hand, the project did not apply adaptive management and modern project management approaches. Some changes such as no involvement of non-for-profit organizations, were not discussed or made known until the terminal evaluation.

## **8. Lessons and recommendations**

8.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The terminal evaluation includes several lessons learned:

- Terms of reference for choosing of a proper decontamination technology should include all relevant criteria such as size, volume, contamination grade, that have to be taken into consideration in order to have a successful tender procedure.
- Well-structured and independent mid-term evaluation is an important element of adaptive management. It provides sufficient time for corrective actions until the end of the project.
- Properly formulated M&E framework that includes SMART objectives and key indicators is critical for project success.

8.2 Briefly describe the recommendations given in the terminal evaluation.

Recommendations included in TE could be groups into several categories as follows:

Follow-up to project activities:

- MoEPP should develop incentives for industry to recover the costs of investments in PCB management and phasing out of PCB-containing equipment.

-- Finish the phasing out of transformers of the four companies that participated in the project but could not finance the phasing out.

- Train customs officers and adjust national legislation to strengthen measures for control of illegal import of PCB-containing equipment and oils.

- MoEPP should organize training for all people involved in PCB management and handling of PCB-containing equipment; as well as create a roster of PCB management experts.

-- Build capacity of an accredited laboratory for gas chromatographic analysis of PCB-concentration in the FYR of Macedonia.

- Ministry of Health and Rade Koncar Servis should find a solution to monitor the exposure of employees to PCBs.

- State environmental inspectors at MoEPP should inform local fire-fighting brigades of all PCB-containing devices.

- MoEPP should organize a fund-raising training for POPs Office to help them in finding financial solutions for future projects.

Broader adoption, replication:

- Rade Koncar Servis and MoEPP should promote the storage and non-combustion and decontamination facility as a regional center for phasing out of PCB-containing equipment and PCB-contaminated oils for the Balkans.
- UNIDO and GEF should propose to other countries replication of institutional arrangements the office embedded in the Ministry of Environment that is responsible for project management of international projects.

Better project management:

- MoEPP should adjust future trainings on PCBs to the needs of participants and use M&e tools to measure effects of capacity development activities;
- The project team would benefit from learning of the tools of a systematic approach to project monitoring, adaptive management, and evaluation.



## 9. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF EO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report reconstructs the project's logical framework and provides an overview of outcomes. More details on project's legislative work should have been provided.	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is consistent, the evidence in most cases is present, but the ratings are sometimes higher than the evidence may support it. For example, the report rates project management as highly satisfactory while, according to TE, the project did not use modern management tools, adaptive management and SMART outcome measurement were lacking.	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report provides a fair assessment of financial risks to sustainability, but more information on other risks would be needed. For example, how feasible it is to develop cost recovery incentives for the industry? The report does not give any information about the project exit strategy.	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learned are supported by the evidence and connected with relevant chapters. On the other hand, most of them are implementation-related. Higher-level, more generalizable lessons are lacking.	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report includes the actual project costs (total and per activity). The comparison of planned and actual co-financing is not very clear.	S
Assess the quality of the report's evaluation of project M&E systems:	The report made an accurate assessment of project M&E systems.	HS
<b>Overall TE Rating</b>		<b>S</b>

## 10. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).

Documents used in preparation of this TER include:

- GEF Operational Program on Persistent Organic Pollutants, GEF/C.22/Inf.4, October 28, 2003
- GEF-5 Chemicals Strategy, GEF-5 Focal Area Strategies
- Project Document, November 2007
- Updated Project Document, June 2008
- Request for Extension on Project Milestones, April 2010
- Mid-Term Evaluation Report, July 2012
- Terminal Evaluation Report, November 2013