Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2016

# 1. Project Data

	Su	ımmary project data	
GEF project ID		3543	
GEF Agency project ID	)	GF/AZE/10/001 - 104030	
GEF Replenishment Pl	hase	GEF 4	
Lead GEF Agency (incl	ude all for joint projects)	UNIDO	
Project name		Environmentally Sound Manag	ement and Disposal of PCBs
Country/Countries		Azerbaijan	
Region			
Focal area		РОР	
Operational Program Priorities/Objectives	or Strategic	POPs-SP2 and SP3	
Executing agencies inv	volved	The Ministry of Ecology and Na	atural Resource (MENR)
NGOs/CBOs involvem	ent	None	
Private sector involve	ment		ke and Azerishiq OJSC (merger company te Oil Company SOCAR - beneficiaries
CEO Endorsement (FS	P) /Approval date (MSP)	04/05/2010	
Effectiveness date / p	roject start	05/20/2010	
Expected date of proj	ect completion (at start)	March 2014	
Actual date of project	completion	September 2017	
		Project Financing	
		At Endorsement (US \$M)	At Completion (US \$M)
Project Preparation	GEF funding	0.11	
Grant	Co-financing	0	
GEF Project Grant		2.12	2.03
GEF Project Grant	IA own	2.12 0.10	2.03
GEF Project Grant	IA own Government		2.03
GEF Project Grant Co-financing	-	0.10	2.03
	Government	0.10 1.28	2.03
	Government Other multi- /bi-laterals	0.10 1.28 0	2.03
	Government Other multi- /bi-laterals Private sector	0.10 1.28 0 3.98	2.03 2.03 2.03
Co-financing	Government Other multi- /bi-laterals Private sector	0.10 1.28 0 3.98 0	
Co-financing Total GEF funding	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10         1.28         0         3.98         0         2.12         5.36         7.38	2.03 0.95 2.98
Co-financing Total GEF funding Total Co-financing Total project funding	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10 1.28 0 3.98 0 2.12 5.36	2.03 0.95 2.98
Co-financing Total GEF funding Total Co-financing Total project funding	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10         1.28         0         3.98         0         2.12         5.36         7.38	2.03 0.95 2.98
Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fina	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10 1.28 0 3.98 0 2.12 5.36 7.38 valuation/review informatio	2.03 0.95 2.98
Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fina TE completion date	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10         1.28         0         3.98         0         2.12         5.36         7.38         valuation/review information         2017	2.03 0.95 2.98
Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fina TE completion date Author of TE	Government Other multi- /bi-laterals Private sector NGOs/CSOs	0.10         1.28         0         3.98         0         2.12         5.36         7.38         valuation/review information         2017         UNIDO Independent Evaluation	2.03 0.95 2.98

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	BLIND REVIEW	<b>BLIND REVIEW</b>	BLIND REVIEW	MS
Sustainability of Outcomes		<b>BLIND REVIEW</b>	BLIND REVIEW	MU
M&E Design		<b>BLIND REVIEW</b>	BLIND REVIEW	S
M&E Implementation		<b>BLIND REVIEW</b>	BLIND REVIEW	MS
Quality of Implementation		<b>BLIND REVIEW</b>	BLIND REVIEW	S
Quality of Execution		<b>BLIND REVIEW</b>	BLIND REVIEW	S
Quality of the Terminal Evaluation Report		BLIND REVIEW	BLIND REVIEW	MS

# 2. Summary of Project Ratings

# **3. Project Objectives**

3.1 Global Environmental Objectives of the project:

According to the Project Document (PD), the project's environmental objective is the complete irreversible destruction and transformation of a minimum of 540 tons of Polychlorinated Biphenyls (PCB) oil, PCB-containing equipment and wastes in an environmentally sound and cost-effective manner and assist Azerbaijan in implementing its obligations under the Stockholm Convention.

3.2 Development Objectives of the project:

As stated in the Project Document, the Development Objectives of the project is to comply with the Stockholm Convention (SC), through implementation of the PCB-related action plans of the NIP including the necessary regulations and standards, strengthening of institutions at the national and local levels, enforcement, capacity building, and awareness raising among the stakeholders in order to manage PCB wastes in an environmentally sound manner.

Three outcomes developed to achieve the project' objectives include:

Outcome 1 Regulatory and institutional capacity building for PCB management

- 1. PCB-related regulations, standards and norms fulfilling the Stockholm Convention requirements developed.
- 2. Measures addressing the Stockholm Convention enforced.
- 3. Laboratory strengthened with methodologies, procedures and information management systems for analytical data processing
- 4. Institutional capacity strengthened for environmentally sound management of PCB

Outcome 2 Sustainable and safe management of PCB stockpiles and wastes

- 1. PCB inventory strengthened and maintained
- 2. Maintenance of PCB equipment undertaken
- 3. Phase-out of PCB-containing equipment implemented
- 4. Decontamination and disposal of PCB- containing equipment and wastes carried out

Outcome 3 Awareness raising among private and public stakeholders for PCB management.

- 1. Increased awareness amongst concerned stakeholders for PCB management
- 2. Project results monitored and reported

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

There were no changes to the GEOs or the DOs.

### 4. GEF IEO 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.

4.1 <b>Relevance</b>	Rating: Satisfactory
----------------------	----------------------

PCBs management constituted a major problem in Azerbaijan. The project's objectives were in line with Azerbaijan, as it accessed to the Stockholm Convention on POPs on 13 January 2004 and committed to reduce the use and phase out POPs in its territory, in order to mitigate environmental degradation and adverse consequences to human health. The National Implementation Plan (NIP) prepared in 2007 identified issues such as weaknesses in the current hazardous waste management practices; need for regulatory and institutional development; capacity building and public awareness in PCB management, that were directly covered under this project and hence highly relevant to the government of Azerbaijan. The project objectives, outcomes and outputs were also fully consistent with the goals and objectives of GEF strategic objectives- POPs-SP2 and SP3 for GEF 4. Project outcomes were also in line with the requirements of the Stockholm Convention and followed Basel Convention Technical Guidelines.

4.2 Effectiveness	Rating: Moderately satisfactory	
-------------------	---------------------------------	--

Based on the evidence in the evaluation report, three out of four outcomes are assigned an effectiveness rating of 'moderately satisfactory', bringing the overall rating for the achievement of the outputs to be 'moderately satisfactory'. The project was largely successful in the construction of a pilot system for PCBs elimination and helped the Government in overcoming the lack of appropriate legislation, standards, and guidelines for PCB disposal and elimination. The project also helped to increase awareness of PCBs among policy makers, stakeholders, professionals, environmental NGOs and

media professionals in the Republic of Azerbaijan. The project developed a control system to improve the enforcement of regulations for proper disposal of PCB-contaminated wastes through developing appropriate tracking documentation, training of inspectors in PCB inspection obligations and use of electronic PCB database. However, the procurement and installation of a suitable non-combustion and decontamination technology for PCB-containing oils and equipment, was delayed by three years due to which only four batches of oil could be processed (15 barrels, 200 l each) with additional 8 tons of oil decontaminated in 2016/2017.The project team developed the necessary technical papers and regulations on PCB management for strengthening legal and regulatory framework for ESM and disposal of PCB oil, equipment and wastes. It also improved institutional capacity at all levels of PCB waste management and disposal. However, some of the important legal documents prepared during the project were still awaiting approval from the Cabinet of Ministries at the time of writing of TE. As stated in the TE 'PCB waste management in Azerbaijan could be effective and sustainable only when it is supported by the Government's policies'.

**Outcome 1:** Regulatory and institutional capacity building for PCB management – Moderately Satisfactory

The project supported the review of national legal and regulatory act and identification of gaps concerning PCB disposal to ensure alignment with the Stockholm Convention (SC) requirements with recommendations presented to MENR. While a number of PCB related legal documents, in the form of 'guidelines', 'Presidential Decrees' and 'order for amendments' were approved by MENR, other important regulations such such as draft AR Law on Industry and domestic waste, amendments to the inventory guidelines of wastes formed during production process, draft amendments to the Law on Protection of Environment and worker safety guidelines were still pending the approval of Cabinet of Ministers at the time of TE (Output 1.1). The inspectors of MENR and other stakeholders' companies were trained by the UNIDO international expert on how to identify and manage PCB containing equipment, who then in turn trained the personal/representatives of the electricity generating supplying companies. In total about 1000 workers were trained, including inspectors from the Division of electro-workshop and electric laboratory (Output 1.2).

Project supported the purchase of five analyzers and two gas chromatographers that were distributed amongst various stakeholders, whose representatives were trained on screening procedures, with sampling and analysis methodology guidance/manuals translated into local language (Output 1.3). A PCB group was created at the MENR that is likely to sustain the efforts after the project is over.

# **Outcome 2:** Sustainable and safe management of PCB stockpiles and wastes – Moderately Satisfactory

Project facilitated the development of standardized forms and reporting guidelines for reporting PCB equipment and oil. Also developed database system for PCB information management and staff trainings of the Ministry and PCB owners were conducted for building their capacity for inventory development and maintenance. Inventory process is an ongoing activity and the results are included in UNIDO inventory report (Output 2.1). A number of trainings and study tours were conducted for PCB equipment maintenance and phase out, for project team, partners and stakeholders (Output 2.2).

Facilities for environmentally sound PCB contaminated material transportation and interim storage was created and necessary trainings imparted with disposal of 3 tons of contaminated oil during the commissioning of the equipment and 8 tons from August 2016 to July 2017 (Output 2.3 and 2.4). However, this activity was delayed as the selection of what was thought to be the 'right and most cost effective' technology for oil decontamination, took 3 years for selection, that seems to be reason for 11tons of disposal of contaminated oil as against a target of 540 tons.

**Outcome 3:** Awareness raising among private and public stakeholders for PCB management – Satisfactory

A number of trainings and workshops were held 'satisfactorily' for the stakeholders, including awareness generation amongst NGOs and wider dissemination through public media such as TV presentations and newspaper articles along with the production of scientific articles in conferences and scientific journals.

**Outcome 4:** Establishment of Project management structure and monitoring and evaluation: Moderately Satisfactory

The project management structure was well established with Project Implementation Office (PIO) and project leadership staff appointed in time. The goal of strengthening the human resources was reached by dedicating a full- time National Project Coordinator and Project Coordinator Assistant and Head of the inventory group. The Project Steering and Stakeholder Coordination Committee (PSSCC) met annually with participation of all relevant parties to review and decide the activities of the project. Project experts were selected based on the experience of the initial inventory process on POPs and were recruited by the UNIDO project manager. National Project Coordinators submitted progress reports regularly and Mid-term evaluation was also carried out in a timely manner. However, it is not clear if the M&E system was robust enough for adaptive management as the project was delayed for three years and regular feedback and monitoring and evaluation could have possibly avoided these delays.

#### 4.3 Efficiency

#### Rating: Moderately satisfactory

The TE confirms that the project team took all the possible measures to ensure project costeffectiveness. Project was implemented along with financial norms and standards for international development project. However, the Project encountered several delays during implementation, mainly because of the long time taken for the selection process and set-up of the facility for decontamination of PCB- containing equipment. There was a delay of approximately three years in the start of decontamination operations because of the problems at choosing a specific decontamination technology of PCBs. TE states that cost-effectiveness of the project was impacted as the project implementation was delayed for three years (TE Pg 25).

Full co-financing also didn't materialize as Ministry of Finance didn't approve the original co-financing of budget since the government hadn't yet approved the NIP. But, as per the TE, the MENR used a substantial amount of internal resources for construction of the storage and disposal facility for decontamination of oil. A large part of the co-financing was not realized, and it is unclear from the TE as how it impacted achievement of various outputs under the project.

4.4 Sustainability	Rating: Moderately unlikely
--------------------	-----------------------------

The project supported the development of institutional framework through capacity building targeted towards government institutions and the relevant private sector, and awareness generation amongst NGOs and other stakeholders to manage PCB waste in an environmentally sustainable manner. However, sustainability of the project would depend on the continued financing from the government to retain its staff and provide incentives for other small companies to adopt measures for PCB waste management. Unless the Cabinet of Ministers approve the NIP, future funding from the government is unlikely due to which the risk to sustainability is assessed to be 'moderately unlikely'.

Risks to the sustainability of project outcomes is further assessed along the following 4 risk dimensions:

#### Financial: Moderately unlikely

The TE doesn't indicate whether the project could secure any follow up funding for the future activities. At the time of the writing of TE, there were no financial mechanisms or incentives to support companies with financial difficulties regardless of the relatively low-cost treatment per kg of PCB-contaminated oil technology. Although, MENR had contributed its significant resources in setting up decontamination facility and the national laboratory for PCB analysis and the three major stakeholders (Azerenergy, Bakielektrikshebeke and SOCAR, state- owned companies) made efforts in engaging with the business model of PCB disposal. However, involvement of other small companies in future would still require funding to provide incentives such as free sampling and disposal of PCB equipment. As per the TE, sustainability of the project in the future depends on continued financing of the Government and its capability to retain trained staff. Unless Cabinet of Ministers approve NIP (awaiting approval at the time of TE), the future funding for the project from the government seems unlikely.

#### Institutional: Moderately likely

As per the evidence in TE, the project supported the capacity building, awareness generation and the collection and dissemination of the relevant information, providing the long term institutional framework to the efforts taken under the project. The Project Implementation Office played the role of an information center within MENR and centralized database system was also established for PCB information management within MENR - are some of the factors that will contribute to enabling institutional environment for the project activities. It is also expected that government will honor obligations to conform to the SC for proper PCBs and PCB-containing equipment management. However, as stated in the TE, the Cabinet of Ministers is still reviewing the NIP, which has otherwise been signed by all concerned Ministries. But NIP had not yet obtained the final endorsement by the Cabinet at the time of the writing of TE. Also, the project team had developed necessary legal documents that also needed to be endorsed by the Government of Azerbaijan. These documents were sent to the Cabinet of Ministries, and are still awaiting approval. In the light of these facts, the institutional aspect of sustainability is rated as 'moderately likely'.

#### Sociopolitical: Likely

The project has provided targeted training and awareness raising, including significant technical capacity enhancements through the PCB decontamination facility. The training and awareness generation was targeted towards government institutions, NGOs, private sector and other stakeholders creating an enabling sociopolitical environment.

#### Environmental: Moderately Likely

The project objective was to manage PCB wastes in an environmentally sound manner, but the TE notes that none of the activities suggest that samples to assess traces of PCB were taken from air, underground water and soil from the interim storage and PCB treatment facility, nor are there any maximal allowed concentration limits defined by law for soil, air and underground water, due to which the risk for this aspect is assessed to be 'moderately likely'.

### 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 the TE, Ministry of Finance didn't provide the original agreed upon co-financing as National Implementation Plan (NIP) had yet not obtained the final endorsement by the Cabinet of Ministers of Azerbaijan. However, the cost of National Centre for Hazardous Waste Management (landfill – 50 hectares) in the vicinity of Baku was covered by MENR. The site was identified and MENR built the facilities for PCBs cleaning decontamination. All the expenses for the infrastructure were paid by MENR, while the expenditures for the installation, transport and training of operators were paid out of the budget of the project. According to the latest TE and latest PIR, only partial co-financing was materialized but none of the reports indicate the impact of low co-financing on the outcomes or sustainability of the project. It also notes that contributions were made by partners from private sector but the amount of contribution is not given in the TE.

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 encountered several delays during implementation. The main reason for the delay, as stated in the TE, pertained to the selection process and set-up of the facility for decontamination of PCBcontaining equipment. There was a delay of approximately three years in the start of decontamination operations because of the problems at choosing a specific decontamination technology of PCBs. But how this delay impacted project outcomes and/or sustainability of the project is not clear from the available reports. The project is likely to have incurred more cost on the salary/staff budget if it was delayed by three years, making less budget available for the rest of the activities, but this aspect is not covered by any of the reports. 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:

The project had good country ownership at the start of the implementation as The Republic of Azerbaijan accessed to the Stockholm Convention on POPs in January 2004 and committed to reduce the use and phase out POPs on its territory. Project experienced 'mixed' level of country ownership during implementation. While, it completed the preparation of the NIP, it's approval by the Cabinet of Ministers was still pending, due to which full co-financing originally committed by the government at the time of the proposal approval, was not fully realized. Project also faced some delays due to long time taken by the government to update or approve some of the regulations/legislations prepared and recommended by the project, some of which are still pending impinging upon the sustainability of the project. However, overall, project had a good support from the government, given the context that this was the first project of its kind in the Caucasus Region that aimed at the practical establishment of an integrated management of PCB-containing equipment.

# 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.

6.1 M&E Design at entry	Rating: Satisfactory	

The PD had a well-designed M&E plan, outlining specific M&E activities, responsible parties, budgets, and timeframes. The activities outlined in the M&E plan were in line with the GEF minimum standards for M&E, and the TE confirms that the budget of USD89,000 was adequate to cover a full-sized project. The PD also outlined various review and evaluation processes, specific reporting requirements, and responsibilities. The PD also detailed out the framework defining the impact indicators, including targets, means of verification, sampling frequency and location of sample collection.

6.2 M&E Implementation
------------------------

As per the TE, project had undergone regular monitoring exercises through undertaking progress reports, mid-term evaluation and various mission reports. However, it questions the utility and the limited scope/purpose of some of the reports. There was also not much information available in the minutes of the Steering Committee meetings reviewed as part of TE. It is also not clear if the project followed/tracked the impact indicators defined in the M&E plan in the project document and also whether annual meetings were undertaken to monitor the progress, given that project was delayed by three years, and for adaptive management.

# 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.

7.1 Quality of Project Implementation	Rating: Satisfactory
---------------------------------------	----------------------

As per TE, UNIDO provided a dedicated focal point – Project Manager, technical and financial advice and backstopping when needed during the project implementation. Project manager had regular presence in the country at crucial times of the project implementation. As stated in the TE 'the Project Manager provided regular and dedicated in-country assistance to the PIO'.

7.2 Quality of Project Execution	Rating: Satisfactory
······································	0

The TE notes that project made a good choice of the Ministry of Ecology and Natural Resources (MENR) as the main implementing institution, considering their responsibility for fulfilling obligations to the SC. This aspect is not covered in detail but TE doesn't highlight any issues concerning the performance of the executing agency. It is evident from the activities/outputs achieved during the project that project management was more or less smooth and had good support from the concerned government institutes and the project office(PIO) established through the project.

# 8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

Project target was to establish a chemical inventory of 15,000 transformers, which according to the TE, was completed between 2011-2013. Although a significant part of developing a centralized data inventory database is over, inventory process is still ongoing including identification and labeling of PCB containing equipment. On the target related to transfer of decontamination technology to the country and disposal of 540 tons of contaminated equipment, it took 3 years to choose a specific decontamination technology of PCBs, all the activities related to this component were delayed and took place towards the end of the project.

As per PIR (2016), the project team developed business plan to permit the operation of the decontamination unit after the termination of the project. The contract was signed with one of the biggest owners of transformers – national oil company SOCAR – which prepared a plan for 2016-2017 for temporary switching off their transformers for maintenance and decontamination. Similar contacts with two other big owners of transformers – national utility companies – were also under preparation, that would make the process of decontamination of PCB sustainable after the completion of the project. As per TE, 3 tons of oil decontaminated during the commissioning of the equipment and 8 tons from August 2016 to July 2017.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered.

#### None.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

#### a) Capacities

The project facilitated capacity building of the government institutes and other stakeholders for the environmentally sound management of PCBs through the adoption of international standards and practices. As per the TE, it enhanced technical awareness on Environmentally Sound management (ESM) concerning PCBs among the national technical stakeholders. The project provided capacity building by developing and delivering training modules involving international experts and local staff (inspectors of MENR and stakeholder companies), who will be able to serve as resource persons for training beyond the project life, assuring the project sustainability. Owners of PCB-containing equipment have been made aware, through specific training, of their obligations for inventory, phase-out, and disposal. The project has created increased awareness of PCBs among policy makers, stakeholders, professionals, environmental NGOs and media professionals in the Republic of Azerbaijan. The project activities also targeted vulnerable population groups with direct contacts with PCBs or who live close to PCB contaminated areas. A PCB group was created within MENR and guidance document prepared for Customs PCB management.

b) Governance

A large part of the project involved developing the updated legislation and technical guidelines related on PCB management and disposal of PCB oil, equipment and wastes, which were transferred to the Ministry for approval. While some of the guidelines/technical documents were approved and implemented, which is a major contribution of the project, most of the regulatory documents are yet to be approved by Cabinet of Ministers.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

#### None.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

Some of the activities that have the potential for replication include:

- One of the most important prerequisites of adopting BAT/BEP for PCB management is the adequate inventory, which was developed during the project and this experience, as per the TE, might be used in neighboring countries.
- The project also created a system of management of PCBs in the power grid companies, which is likely to be sustained by these companies.

However, as noted by the TE, PCB waste management in Azerbaijan could be effective and sustainable only when it is supported by the Government's policies. The Cabinet of Ministers is still reviewing the NIP, which has been signed by all concerned Ministers. Approval of NIP as legal document would allow the government to allocate more funds and the sustainability of the project in the future depends on continued financing of the Government and its capability to retain trained staff.

# 9. Lessons and recommendations

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

- Particular attention should be paid to the quantitative figures of the outputs to be accomplished. The project document should always include precise indicators for the outputs to be produced, in order to facilitate the monitoring of the achievements.

- Long-term approach is needed to achieve full application of the concept of PCBs elimination and disposal according to the Stockholm Convention.

- Project Implementation Office (National Project Coordinator and Project Assistant) is the key factor for implementing the Project.

- Effective and efficient implementation modality of the Project has to be arranged through Implementing Agency and national execution authority well in advance before the start of the implementation of the Project (NIP has to be endorsed and signed before the startup of the implementation).

- Integrating the objectives of the project into national, environmental and social development plans would give a good opportunity to mobilize financial support and high level of co-financing.

9.2 Briefly describe the recommendations given in the terminal evaluation.

- Cabinet signs NIP as soon as possible to constitute the it a legally approved document

- Competent responsible government authorities of the Republic of Azerbaijan to accelerate the approval of documents prepared during the project.

- It is strongly recommended to proceed with the decontamination of the equipment containing PCB oil and waste.

- It is strongly recommended to the facility operational team to provide samples of treated oil (PCB free) to an independent laboratory to verify the quality of the oil.

- It is highly recommended the three major stakeholders (SOCAR, Azerenergy, Bakielektrikshebeke) to provide sufficient amount of transformer oil in order disposal facility to operate on a continuous mode.

- It is recommended to continue with the inventory of the equipment contaminated with PCB

- Due to the large number of transformers that are to be inventoried, it is suggested to continue providing data by the projects stakeholders to the database on the regular basis.

- It is imperative that the Ministry of Ecology and Natural Resources continues the monitoring of the PCB inventory and disposal activities. The Stockholm Convention requires regular national reporting on PCB inventory.

- It is recommended to consider cement co-processing technology as an option for hazardous waste disposal.

- For other companies, in order to gain their cooperation on a voluntary basis, since the legislation is not officially in place, it is suggested to offer them free screening and free disposal of some of their PCB containing transformers.

- It is recommended that in the future PIO/MENR should organize a specialized training for all people involved in PCB management and handling of PCB-containing equipment including monitoring of environmental media (air, underground water, soil) at the interim storage

# **10. 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 IEO 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 TE provides adequate evidence of the achievement of project's outcomes. But there is limited information and analysis on how the delays and lower co-financing impacted the project outcomes and its impact	MS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The TE is largely consistent, except it could elaborate more on impact of delays and lower co-financing on the impact of the project. The section on M&E implementation is also weak in terms of explaining whether the system was effective and if not, what were the shortcomings.	MS
To what extent does the report properly assess project sustainability and/or project exit strategy?	The evidence on sustainability and exit strategy was complete and adequately covered.	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learnt mentioned in the TE are in line with the evidence in the main body of the report	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	This was the weakest section of the TE as it didn't include actual numbers in terms of how much contributions were made by different stakeholders against their commitment in the original PD. It could be that the evaluator had difficulty in ascertaining such figures from the project accounts at the time of TE.	MU
Assess the quality of the report's evaluation of project M&E systems:	This section of the TE could elaborate more on the specifics, like whether indicators were developed and monitored regularly and if such a system facilitated adaptive management.	MS
Overall TE Rating		MS

 $(0.3^{*}(4+4)) + (0.1(5+5+4+3)) = 2.4+1.7 = 4.1$ 

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