



Project Implementation Report

(1 July 2022 – 30 June 2023)

Project Title:	Strengthening the environmentally-sound management and final disposal of PCBs, in Paraguay
GEF ID:	9357
UNIDO ID:	150368
GEF Replenishment Cycle:	GEF-6
Country(ies):	Paraguay
Region:	LAC - Latin America and Caribbean
GEF Focal Area:	Chemicals and Waste (CW)
Integrated Approach Pilot (IAP) Programs¹:	NA
Stand-alone / Child Project:	Stand-alone
Implementing Department/Division:	TCS/CCM/RMC
Co-Implementing Agency:	NA
Executing Agency(ies):	Ministry of Environment and Sustainable Development (MADES)
Project Type:	Full-Sized Project (FSP)
Project Duration:	80 months
Extension(s):	1
GEF Project Financing:	USD 3,953,250
Agency Fee:	USD 375,559
Co-financing Amount:	USD 14,485,000
Date of CEO Endorsement/Approval:	2/21/2018
UNIDO Approval Date:	3/25/2018
Actual Implementation Start:	4/16/2018
Cumulative disbursement as of 30 June 2023:	1,392,982.50
Mid-term Review (MTR) Date:	5/30/2022
Original Project Completion Date:	3/9/2023
Project Completion Date as reported in FY22:	4/16/2024
Current SAP Completion Date:	12/31/2024
Expected Project Completion Date:	12/31/2024

¹ Only for GEF-6 projects, if applicable

Expected Terminal Evaluation (TE) Date:	11/1/2024
Expected Financial Closure Date:	11/1/2025
UNIDO Project Manager²:	Lamia Benabbas

I. Brief description of project and status overview

Project Objective							
The project aims to protect human health and the environment through environmentally sound management and final disposal of PCB-containing equipment and wastes, in Paraguay.							
<table border="1"> <thead> <tr> <th><i>Project Core Indicators</i></th> <th><i>Expected at Endorsement/Approval stage</i></th> </tr> </thead> <tbody> <tr> <td>5</td> <td>Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern</td> </tr> <tr> <td></td> <td>Disposal of 80,000 tons of POPs (PCBs, obsolete pesticides): 700 metric tons of PCBs</td> </tr> </tbody> </table>		<i>Project Core Indicators</i>	<i>Expected at Endorsement/Approval stage</i>	5	Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern		Disposal of 80,000 tons of POPs (PCBs, obsolete pesticides): 700 metric tons of PCBs
<i>Project Core Indicators</i>	<i>Expected at Endorsement/Approval stage</i>						
5	Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern						
	Disposal of 80,000 tons of POPs (PCBs, obsolete pesticides): 700 metric tons of PCBs						

Baseline
<p>Before the project, Paraguay lacked the regulatory framework, national technical capacity and awareness to properly, address PCB-related problems, especially regarding the fire that took place in a transformer deposit at the National Electrical Administration (ANDE), in October 2015. Although some efforts were made to address PCB-related problems nationally, financial and technical assistance was needed to advance environmentally sound management of PCBs, the regulatory framework, technical best practices and awareness that could minimize the negative environmental and health effects of inadequate PCB management. Without GEF-funding and technical assistance through UNIDO, it was unlikely that a long-term environmentally sound management system, including a final disposal system for PCBs would be established in Paraguay.</p> <p>Before the project, Paraguay had been unable to develop and effectively implement an environmental management system (EMS) for PCBs, nor were they able to adopt the necessary regulatory framework and develop institutional capacity to monitor and control PCBs. Due to low technical capacity, a detailed PCB inventory could not be developed, nor analytical capacity built, therefore there was no significant improvement in the existing storage conditions and EMS of PCBs. Without this inventory, neither an appropriate ESM nor a technically and economically feasible disposal strategy could be set-up. GEF funding and UNIDO's technical assistance successfully support these activities.</p> <p>Before the project, the management of out-of-service equipment was not environmentally sound, and there was a lack of knowledge and information on technical standards and procedures for proper handling and storage of PCB contaminated equipment, oils and waste. In particular, the situation at ANDE's storage site in Laurely was critical, due to lack of proper management of the transformers, and to the environmental problems that occurred after the fire in October 2015. This fire and the related exposure of PCBs posed additional risks to human and environmental health. In addition, it posed challenges (human resources, technical and knowledge challenges) to the safe handling of PCB-containing equipment, oil and waste. Without financial and technical support an improved environmental situation was not likely.</p> <p>In addition, the site in Boggiani, the only site (out of 27 national sites) for maintenance and repair activities for distribution transformers, faced serious problems in terms of infrastructure and management. Such</p>

² Person responsible for report content

concerns included the absence of analytical testing for the existence of PCBs, a lack of ESM precautionary measures (e.g., transformers stored outdoors, no safety measures for surface and groundwater) and the overcapacity of the site. Similar scenarios were seen in Capiata and Ciudad del Este due to a lack of management procedures (e.g., no transformer classification, PCB tests, lack of environmental and health measures) and increased capacity following the fire in San Lorenzo.

Under this scenario, PCBs would continue to be released into the environment and cross-contamination would continue, causing potential environmental and human health risks, especially to workers, communities living near in-use and phase-out transformers, women and children. Occupational health and safety standards and awareness-raising material would not be available to help protect workers and the population living near to storage facilities from exposure to PCBs.

To sum up, without GEF funding, Paraguay would face the challenge of complying with Stockholm Convention requirements related to PCB management and disposal by 2028. Therefore, the risks of exposure to PCBs would pose serious environmental and health concerns within the country, especially for workers dealing with PCB-oil, PCB-contaminated equipment and PCB waste, as well as for the general public, and at the global level due to the POPs properties of PCBs.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e., FY23. Please also provide a short justification for the selected ratings for FY23.

In view of the GEF Secretariat's intent to start following the ability of projects to adopt the concept of adaptive management³, Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e., FY22, in the last column.

Overall Ratings ⁴	FY23	FY22
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	<i>Highly Satisfactory (HS)</i>	<i>Satisfactory (S)</i>
<i>Inventory activities, which were delayed due to the pandemic, have been completed. It has been possible to continue with the preparation of the PCB elimination activities in Paraguay.</i>		
Implementation Progress (IP) Rating	<i>Satisfactory (S)</i>	<i>Satisfactory (S)</i>
<i>Despite a delay in the activities, progress was made, and the activities related to component 3 have started according to schedule.</i>		
Overall Risk Rating	<i>Low Risk (L)</i>	<i>Low Risk (L)</i>
<i>With the new extension (until end of 2024), there is low risks of delays for the successful and timely completion of the final disposal of PCB-contaminated equipment, oils, and waste (the main pending activity). Preparatory work was done in this reporting period, as well as identification of, and coordination among, relevant stakeholders.</i>		

³ Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

⁴ Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress in FY23
Component 1 – Environmentally sound management and final disposal of PCB-containing equipment, wastes and stockpiles				
Outcome 1.1: National PCB policy improved, capacity built, and knowledge and awareness increased				
Output 1.1.1: National PCB regulations are in line with international standards.	Number of national PCB regulation upgraded and approved.	Two PCB management regulations have been drafted and approved but are not being implemented by the environmental authority. The institution needs to have compliance control capacity enhanced.	The PCB policy and corresponding regulations are upgraded.	The new regulation proposal was validated by the Project's Technical Support Committee in December 2019. MADES submitted the document (Decree) for signature to the Presidency of the Republic. Due to the delay in the signing of the Decree by the President of the Republic, it has been decided to promulgate a Resolution containing the same articles and updated deadlines. In this reporting period: In February 2023, Resolution No. 138 was enacted establishing measures for the management of PCB in Paraguay. Currently, work is being done on the regulation of the Resolution.
Output 1.1.2: National PCB management Centre established to support PCBs owners to properly manage and dispose of PCBs and related wastes.	Number of companies implementing ESM plan for their PCB contaminated inventories.		SEAM has technical knowledge to support the electricity centre with ESM of PCB management.	A website has been implemented that functions as a PCB Centre: http://www.mades.gov.py/proyectos/proyecto-gar-pcb-paraguay/ The technicians of the Environmental Quality Control Department of MADES are in charge of reviewing the PCB Management Plans, within the framework of the Environmental Impact Assessment process. The approval of an operating protocol for the PCB Center is expected during the second half of 2023. No new activities in this reporting period.
Output 1.1.3: National data system set and analytical services strengthened to fully support the inventory development and management of PCBs and related wastes, in line with international standards and best practices.	PCB database linked to univocal code in PCB labels.		The PCB national database up and running.	The PCB System (Database) and APP for Inventory are finalized and approved, and they are also linked to the Environmental Information System of MADES. A MADES Resolution has been promulgated for the mandatory use of the system, and it is currently available and in use: http://www.mades.gov.py/resoluciones/por-la-cual-se-dispone-la-implementacion-y-la-carga-digital-obligatoria-del-modulo-transformadores-anexo-ii-donde-se-realiza-el-registro-de-equipos-electricos-y-desechos-el-delineamiento-y-la/ There are currently three accredited laboratories in PCB oil analysis and two that are in the process of accreditation of PCB analysis in soil. No new activities in this reporting period.

Output 1.1.4: Hazmat and risk management trainings conducted and awareness raised to reduced exposure of workers and the general public to PCB and related toxic wastes	Number of people trained (male/ female). Number of specific training related to gender issues (male/ female).		# At least 50 people trained on Hazmat (40% women, 60% men). # At least one specific training to address gender concerns along the PCB management cycle. # At least 50 participants (80 % women/ 20 % men) at the specific gender training.	A proposal for PCB emergency protocols has been finalized. The document has been prepared with the contribution of first responders. In this reporting period: Implementation of an Incident Command System, based on the Protocol, was prepared, and is scheduled for September and November 2023.
Outcome 1.2: National PCB management plans ready for smooth ESM and disposal of PCB-containing equipment and waste				
Output 1.2.1: Inventory of at least 10,000 PCB-containing equipment units and PCB wastes carried out, including sampling in oil and soils and with sound analytical methodologies.	No. of transformers properly labelled and tested.		# Sampling and analysis of at least 10,000 transformers.	In this reporting period: More than 10,000 pieces of equipment and waste were inventoried and analyzed. Approximately 685 Tons of PCBs contained in oil, equipment and waste have been confirmed, including equipment burned in the 2015 San Lorenzo fire. Previous reporting periods: 9,905 equipment and waste containers have been inventoried to date. During the third trimester of 2022, samples of 1,100 equipment and oil containers are expected to be carried out. By June 2022, 371 tons of equipment and waste containing PCBs had been confirmed.
Output 1.2.2 ESM and disposal plan for PCBs developed, including cost-effective disposal options.	No. of PCB stakeholders with PCB management Plans integrated into The national PCB management plan.		A functional and long-term system for the ESM management of PCB developed.	In this reporting period: Preparation of guides for different stages of the environmentally sound management of PCBs in Paraguay: ESM-PCB Sampling Guide; GAR-PCB storage guide; GAR-PCB Guide for Importers, Manufacturers and Workshops. Training activities in PCB Management were carried out, in coordination with UNITAR and international experts.
Output 1.2.3: Assessment of PCB/u-POPs pollution due to fire at ANDE PCB-storage facilities.	# Assessment of the PCB/u-POPs pollution.		Assessment of the PCB storage place at the San Lorenzo site finalized.	In this reporting period: Training activities in sampling and soil analysis by Screening were carried out. In total, 88 composite samples were analyzed, of which only 15 samples are below 5 ppm, 24 between 5 and 10 ppm and 45 above 10 ppm. A report has been delivered to ANDE with the aforementioned results and the pertinent recommendations in order to remedy the contamination detected.
Outcome 1.3: ESM and disposal of PCB-containing equipment and wastes				
Output 1.3.1: Current PCB interim storage facilities upgraded and operational	# Number of interim storage facilities upgraded.		At least one temporary storage facility upgraded for the storage, packaging and transportation of PCBs.	Work has begun on the conditioning of the three storage facilities located in the San Lorenzo Substation. A guide has been finalized that contains the guidelines to be resolved for immediate signature, as well as medium and long-term measures. No new activities in this reporting period.

Output 1.3.2: At least 700 metric tonnes of PCB-containing equipment and waste disposed of and/ or decontaminated.	<p># Quantity of PCB contaminated equipment, oils and waste eliminated (metric tonnes).</p> <p># Quantity of PCB contaminated equipment, oils and waste safeguarded (metric tonnes).</p> <p># Number of jobs created (male/ female).</p> <p># Materials recycled (tonnes).</p> <p># Commercial value of materials recycled (USD).</p>		<p># 700 tonnes of PCB-Containing transformers identified, removed, packed, exported and eliminated in an environmentally sound manner and according to the Chemicals and Waste Conventions.</p> <p># 5 staff concerned with environmental concepts working in the electricity field (40% women and 60% men).</p>	<p>In this reporting period: The terms of reference for the management of approximately 350 tons of PCB-containing equipment, oil and waste have been developed. Due to the current costs of treatment and/or elimination, equipment and procedures have been prioritized so that the project can cover these needs.</p>
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III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk ⁵
1	Private owners would not report their PCB-containing equipment and wastes.	Low risk (L)	Low risk (L)	The existing regulatory framework will be upgraded to require the reporting of PCBs and on-site institutional inspections will be required. Private enterprises will be informed about their obligations under the law. GEF funded disposal and treatment of PCB wastes and potential recovery of valued metals and mineral oil would help in overcoming PCB owners' reluctance to cooperate with the project.	The framework of the environmental impact assessment now requires continuous reporting from the private sector to MADES, through the PCB Information System. With the promulgation and dissemination of Resolution 138, even more participation from the private sector is expected in terms of reporting data and management plans.	
2	Technical staff, participating in the project implementation, and, in particular, having contact with PCB-contaminated equipment will be excessively exposed to PCB harmful influence.	Low risk (L)	Low risk (L)	The technical staff will be trained on proper handling of PCB wastes and equipment. Relevant guidelines will be developed or adjusted and introduced at the technical project facilities and for the transportation teams. Protective clothes and equipment will be provided to the technical staff. Places for PCB-waste storage will be properly guarded to prevent admittance for non-authorized staff.	Inventory work was carried out by technicians (MADES and ANDE) trained in PCB. A sampling guide has been developed and shared with MADES and ANDE that is attached to this report. PPE has been purchased for field work and analysis. Training events for all public will be carried out for the correct sampling procedure in different containers.	
3	Contamination of the environment during transport / handling of the PCB-containing equipment. There is a danger that some PCB-wastes could be disposed of	Low risk (L)	Low risk (L)	The in-depth inventory will record locations, volumes, weights and other conditions of PCB-containing equipment and wastes. The project management team and the environmental authorities will be able to follow the disposal paths of the equipment and wastes until safe disposal.	Reports of the screening results are delivered to the owners of equipment and waste where those that contain a concentration of 50 ppm or higher are indicated for labelling.	

⁵ New risk added in reporting period. Check only if applicable.

	illegally at unauthorized places, thus increasing environmental pollution and creating new "hot spots".					
4	Climate Change Risks might include unexpected weather events that disrupt the project processes on sites, causing further contamination.	Low risk (L)	Low risk (L)	Mitigation and upscaling measures will be taken at the storage facilities to reduce the risks associated with extreme weather events.	A guide has been developed for the proper storage of equipment and waste.	

2. If the project received a sub-optimal risk rating (H, S) in the previous reporting period, please state the actions taken since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

3. Please indicate any implication of the **COVID-19** pandemic on the progress of the project.

Due to the pandemic, the work related to the Inventory was delayed, in addition to the scheduled works in the Administración Nacional de Electricidad (ANDE) warehouses. These activities began in the second half of 2020 and continued until May 2023.

Due to the delay, the Project Steering Committee approved a 20-month extension, in line with Mid-Term Review's recommendation. The extension request was accompanied by a Work Plan until 31 December 2024 and the budget projection. The extension was approved in November 2022. The project is on track to completion by the new end date.

4. Please clarify if the project is facing delays and is expected to request an **extension**.

No further extensions envisioned.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

The overall project rating of the MTR was **Satisfactory**. The main findings and recommendations are:

MADES has invested efforts and resources to manage the PCB project with a long-term vision, but, due to some external factors, the PCB management strategy was not fully defined. Among these factors are: (i) the signature of the decree at the Presidential level, (ii) the degree of participation of private PCB owners.

The active participation of ANDE has contributed positively to the project; for example, the coordination with the PMU facilitated the data collection from the field, despite COVID restrictions.

During the project analysis, some opportunities for improvement are identified; for example:

- (i) Due to COVID restrictions, PCB disposal and inventory activities were delayed; analysis and critical path milestones were not identified in the planning tools; this information is needed to inform stakeholders if the extension of the project is a real option.
- (ii) Monitoring can be more holistic; for example, there is no centralized and updated information system for the resources that were committed in the co-financing letters. This information would identify opportunities to improve stakeholder participation.
- (iii) Lessons learned and good practices that contribute to adaptive management are not documented in an iterative manner.

The National Coordination and the PMU team have solved the abovementioned limitations of the scope and time through recursive actions and coordination with the project's main actors.

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

Category A project

Category B project

Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	Contamination of soil from spills of PCBs and hazardous chemicals at the Sampling, Transient Storage and Treatment / Disposal stages	A guide (manual) - previously developed - serves as guidance for the proper storage of equipment and waste. For the sampling, the necessary elements have been provided to contain spills, contemplated in the guide for sampling.	All sampling teams have a supervisor who monitors the process.
	Contamination of soil by fires Contamination of soil by fires of equipment and materials contaminated with PCBs in the Sampling, Transient Storage and Treatment / Elimination stages Equipment and materials contaminated with PCBs in the Sampling, Transient Storage and Treatment /	For the sampling, the necessary elements have been provided to contain spills, contemplated in the Guide for sampling. A guide was developed for the proper storage of equipment and waste.	All sampling teams have a supervisor who monitors the process.

	Elimination stages.		
	Contamination of groundwater by spills in the Sampling, Transient Storage and Treatment / Disposal stages.	A guide has been developed for the proper storage of equipment and waste. For the sampling, the necessary elements have been provided to contain spills, contemplated in the Guide for sampling.	All sampling teams have a supervisor who monitors the process.
	Contamination of groundwater by fires in the stages of Transient Storage and Treatment / Elimination.	A guide has been developed for the proper storage of equipment and waste.	All sampling teams have a supervisor who monitors the process
	Air pollution by fires in the stages of Transient Storage and Treatment / Elimination.	A guide has been developed for the proper storage of equipment and waste.	All sampling teams have a supervisor who monitors the process
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	NA	NA	NA

V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

An inter-institutional agreement is agreed (signature pending) between ANDE and MADES for joint work in the San Lorenzo facilities (i.e., Administración Nacional de Electricidad (ANDE)) to facilitate the final disposal of PCB-contaminated equipment, oils, and waste (the main activity of the project).

The Itaipu Binational entity has also joined the decontamination and/or elimination activities.

Since the beginning of the project, UNIDO is in constant coordination with the Ministry and other national counterparts, such as the Centro de Estudios Ambientales y Sociales (CEAMSO) or ANDE.

With the ANDE, sampling processes began in 2020 in regional temporary warehouses, as well as on the premises where equipment repair activities are carried out. Also, in deposits (San Lorenzo), stations and substations throughout the country.

Private and academic sector laboratories participate in training activities and planning meetings. The main challenge is to reduce costs in the analysis processes, since demand is still low. Even so, two private sector laboratories are working on the accreditation of analysis of environmental matrices (mainly soil).

2. Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other partners/stakeholders of the project (e.g., private sector, CSOs, NGOs, etc.).

3. Please provide any **relevant stakeholder consultation** documents.

- 9357_Project Steering Committee minutes_02.11.2022
- 9357_ANDE-MADES Meeting_Minutes 01/2023
- 9357_Capacity building L2000 DX_Minutes_02.08.2022

VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress achieved on implementing gender-responsive measures and using gender-sensitive indicators**, as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent),.

The project makes special effort to ensure at least 50% participation of women in all trainings, dialogues and planning events. Data show women participation is usually above 50% of the total of participants. In all trainings and meetings, participant lists are disaggregated by gender.

VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

Different training activities have been carried out on PCB management, the legal framework, database and reporting to MADES.

Training activities have been aimed at members of the Technical Support Committee, holders, environmental consultants, importers of oil and equipment, manufacturers, and transformer maintenance and repair workshops.

The main knowledge management activities / products **in this reporting period** fall under output 1.2.2:

- Preparation of guides for different stages of the environmentally sound management of PCBs in Paraguay: GAR-PCB Sampling Guide; GAR-PCB storage guide; GAR-PCB Guide for Importers, Manufacturers and Workshops.
- Training activities in PCB Management were carried out, in coordination with UNITAR and international experts.

2. Please list any **relevant knowledge management mechanisms / tools** that the project has generated.

Websites:

- <https://www.mades.gov.py/proyectos/fortalecimiento-de-la-gestion-ambientalmente-racional-y-eliminacion-de-los-pcb-en-paraguay/inicio/> <http://www.mades.gov.py/proyectos/proyecto-gar-pcb-paraguay/>
 - <https://www.mades.gov.py/proyectos/proyecto-gar-pcb-paraguay/>
 - <https://www.pcb.unitar.org/guidance-documents> (to be published in the coming months)
- Remaining guides are ready to be published online (expected date: 31 August 2023)

VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

The main achievements *during this reporting period* are related to the following outcomes:

- **Output 1.1.1: Development of the national regulatory and normative framework on PCBs:** In February 2023, Resolution No. 138 was enacted establishing measures for the management of PCB in Paraguay.
- **Output 1.1.4: Hazmat and risk management training.** Implementation of an Incident Command System, based on the Protocol, was prepared, and is scheduled for September and again in November 2023.
- **Output 1.2.1: Inventory of PCB-containing equipment units and PCB wastes:** More than 10,000 pieces of equipment and waste have been inventoried and analyzed. Approximately 685 Tons of PCBs contained in oil, equipment and waste have been confirmed, including equipment burned in the 2015 San Lorenzo fire.
- **Output 1.2.2: ESM and disposal plan for PCBs developed, including cost-effective disposal options.** Preparation of guides for different stages of the environmentally sound management of PCBs in Paraguay: GAR-PCB Sampling Guide; GAR-PCB storage guide; GAR-PCB Guide for Importers, Manufacturers and Workshops. Training activities in PCB Management have been carried out, in coordination with UNITAR and international experts.
- **Output 1.2.3: Assessment of PCB/u-POPs pollution due to fire at ANDE PCB-storage facilities.** Training activities in sampling and soil analysis by Screening have been carried out. In total, 88 composite samples have been analyzed, of which only 15 samples are below 5 ppm, 24 between 5 and 10 ppm and 45 above 10 ppm. A report has been delivered to ANDE with the aforementioned results and the pertinent recommendations in order to remedy the contamination detected.
- **Output 1.3.2: PCB-containing equipment and waste disposed of and/ or decontaminated:** The TORs for the final disposal of PCB-contaminated equipment, oils, and waste of approximately 350 tons of PCB-containing equipment, oil and waste have been developed.

The main challenge was the delay, but, with the new extended deadline, the project is again on track to successfully complete all its activities by the new end date.

2. Please briefly elaborate on any **minor amendments**⁶ to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

	Results Framework	NA
	Components and Cost	NA
	Institutional and Implementation Arrangements	NA
	Financial Management	NA

⁶ As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.

x	Implementation Schedule	Project Extension until 31 December 2024
	Executing Entity	NA
	Executing Entity Category	NA
	Minor Project Objective Change	NA
	Safeguards	NA
	Risk Analysis	NA
	Increase of GEF Project Financing Up to 5%	NA
	Co-Financing	NA
	Location of Project Activities	NA
	Others	

3. Please provide progress related to the **financial implementation** of the project.

As of 30 June 2023, UNIDO has implemented:

- **Total to date: USD 1,392,982.50**
- **This reporting period: USD 222,158.03**

1. **International and National Consultants.** To carry out the coordination, execution and monitoring of the activities planned in the Project, in addition to the support of experts in the areas of legal framework, HAZMAT and management of PCBs (BL11+BL17).

- Total to date: USD 461,608.64
- This reporting period: USD 170,636.4

2. **Travel (BL 15).**

- Total to date: USD 24,700.49
- This reporting period: USD 12,842.12

3. **Subcontract (BL21):**

- Total to date: USD 763,057.16
- This reporting period: USD 30,088.49

3.a UNIDO made 6 disbursements to the Centro de Estudios Ambientales y Sociales (CEAMSO) according to the contract signed. The total disbursement to date is USD476,998.2. The main expenditures of CEAMSO *during the reporting period* (1 July 2022 to 30 June 2023) were:

- National Consultants: USD 38,525.49
- Laboratory analysis and sampling: USD 67,483.11
- Local travel: USD 3,925.81

3.b UNIDO made 3 disbursements to UNITAR according to the contract signed. The total disbursement to date is USD 161,552.

4. **Train / fellowship / study (BL 30)**

- Total to date: USD 8,586.27
- Total reporting period: USD 0

5. **International Meetings (BL 35).**

- Total to date: USD 1,518.21
- Total reporting period: USD 0

6. **Equipment:** This Budget line was mainly for the Laboratory analysis (screening and chromatography) of PCBs (BL45).

- Total to date: USD 82,310.86.
- This reporting period: USD 2,242.99

7. **Other Direct Costs** were incurred for payments for specific project services (BL51).

- Total to date: USD 59,787.14
- This reporting period: USD 6,348.03

Budget available as of today – see below table (GRANT DELIVERY REPORT) for details:

Output 150368-1-02-01 – National PCB policy improved: 158,938.59

Output 150368-1-02-02 – National PCB Management plan: 81,513.55

Output 150368-1-02-03 - ESM and final disposal: 2,192,172.06

Output 150368-1-51-01 – Project Management: 28,481.65

Output 150368-1-53-01 - Evaluation: 99,161.65

UNIDO GRANT DELIVERY REPORT		Grant:	200003413	Grant Status:	Closed	Grant Validity:	29.07.2016 - 31.12.2018				
		Sponsor:	400150 - GEF - Global Environment Facility	Currency:	USD	Reporting Period:	29.07.2016 - 30.06.2023				
		Other Reference:	9357-U3-PP-PP-GR-01	Fund:	GF	Prepared on:	30.06.2023				
Project	Project Description	Country	Region	Project Manager			Project Validity				
150368	STRENGTHENING THE ENVIRONMENTALLY-SOUND MANAGEMENT AND FINAL DISPOSAL OF PCBs, IN PARAGUAY	Paraguay	The Americas	Lamia Benabbas			30.06.2016 - 31.12.2024				
	Description	Released Budget Current Year (a)	Obligations Current Year (b)	Disbursements Current Year (c)	Expenditures Current Year (d=b+c)	Total Agreement Budget (e)	Released Budget (f)	Obligations + Disbursements (g)	Funds Available* (h=f-g)	Support Cost (i)	Total Expenditures (j=g+i)
150368											
150368-1-01-01	CEO endorsement drafted	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	0.00	0.00	0.00	0.00	67,244.87	67,244.87	67,244.87	0.00	0.00	67,244.87
1500	Local Travel	0.00	0.00	0.00	0.00	30,050.23	30,050.23	30,050.23	0.00	0.00	30,050.23
1700	Nat.Consult./Staff	0.00	0.00	0.00	0.00	38,717.68	38,717.68	38,717.68	0.00	0.00	38,717.68
2100	Contractual Services	0.00	0.00	0.00	0.00	88,355.72	88,355.72	88,355.72	0.00	0.00	88,355.72
3000	Train/Fellowship/Study	0.00	0.00	0.00	0.00	8,586.27	8,586.27	8,586.27	0.00	0.00	8,586.27
3500	International Meetings	0.00	0.00	0.00	0.00	2,601.26	2,601.26	2,601.26	0.00	0.00	2,601.26
4500	Equipment	0.00	0.00	0.00	0.00	7,238.71	7,238.71	7,238.71	0.00	0.00	7,238.71
5100	Other Direct Costs	0.00	0.00	0.00	0.00	2,189.73	2,189.73	2,189.73	0.00	0.00	2,189.73
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23,750.00	23,750.00
150368-1-01-01	Total	0.00	0.00	0.00	0.00	244,984.47	244,984.47	244,984.47	0.00	23,750.00	268,734.47
150368	Total	0.00	0.00	0.00	0.00	244,984.47	244,984.47	244,984.47	0.00	23,750.00	268,734.47
200003413	USD Total	0.00	0.00	0.00	0.00	244,984.47	244,984.47	244,984.47	0.00	23,750.00	268,734.47
150368-1-02-01	1. National PCB policy improved	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	66,234.47	4,320.00	2,201.55	6,521.55	77,065.72	77,065.72	17,362.80	59,712.92	0.00	17,362.80
1500	Local Travel	1,005.94	0.00	0.00	0.00	4,500.00	4,500.00	3,494.06	1,005.94	0.00	3,494.06
1700	Nat.Consult./Staff	31,327.25	0.00	0.00	0.00	64,446.41	64,446.41	33,119.16	31,327.25	0.00	33,119.16
2100	Contractual Services	0.00	0.00	0.00	0.00	997.29	997.29	997.29	0.00	0.00	997.29
3000	Train/Fellowship/Study	64,085.07	0.00	0.00	0.00	64,085.07	64,085.07	0.00	64,085.07	0.00	0.00
3500	International Meetings	0.00	0.00	0.00	0.00	1,518.21	1,518.21	1,518.21	0.00	0.00	1,518.21
4500	Equipment	2,454.15	0.00	11.04	11.04	14,780.70	14,780.70	12,337.59	2,443.11	0.00	12,337.59
5100	Other Direct Costs	2,110.87	1,670.07	76.50	1,746.57	3,291.71	3,291.71	2,627.41	364.30	0.00	2,627.41
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,805.71	6,805.71
150368-1-02-01	Total	167,217.75	5,990.07	2,289.09	8,279.16	230,685.11	230,685.11	71,746.52	158,938.59	6,805.71	78,552.23
150368-1-02-02	2. National PCB management plans	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	41,289.71	20,027.00	16,891.99	36,918.96	54,320.00	54,320.00	49,649.25	4,370.75	0.00	49,649.25
1500	Local Travel	12,697.99	0.01	2,180.18	2,180.19	16,316.00	16,316.00	5,798.20	10,517.80	0.00	5,798.20
1700	Nat.Consult./Staff	34,320.87	0.00	0.00	0.00	34,320.87	34,320.87	0.00	34,320.87	0.00	0.00
2100	Contractual Services	12,595.33	0.00	0.00	0.00	214,623.90	214,623.90	202,028.57	12,595.33	0.00	202,028.57
3000	Train/Fellowship/Study	9,000.00	0.00	0.00	0.00	9,000.00	9,000.00	0.00	9,000.00	0.00	0.00
4500	Equipment	32.49	0.00	11.04	11.04	31,510.39	31,510.39	31,488.94	21.45	0.00	31,488.94
5100	Other Direct Costs	9,323.87	(1,470.04)	106.36	(1,363.68)	15,051.33	15,051.33	4,393.98	10,657.35	0.00	4,393.98
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28,016.18	28,016.18
150368-1-02-02	Total	119,260.96	18,556.97	19,189.54	37,746.51	375,142.49	375,142.49	293,628.94	81,513.55	28,016.18	321,645.12

150368-1-02-03	3. ESM and final disposal	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	85,000.00	22,189.80	20,777.28	42,987.08	85,000.00	85,000.00	42,987.08	42,032.92	0.00	42,987.08
1500	Local Travel	19,000.00	1,891.38	6,344.20	8,235.58	19,000.00	19,000.00	8,235.58	10,764.42	0.00	8,235.58
1700	Nat Consult./Staff	9,999.06	0.00	0.00	0.00	9,999.06	9,999.06	0.00	9,999.06	0.00	0.00
2100	Contractual Services	2,130,827.82	(23,000.00)	52,999.80	29,999.80	2,860,859.12	2,860,859.12	590,031.30	2,100,827.82	0.00	590,031.30
3000	Train/Fellowship/Study	9,000.00	0.00	0.00	0.00	9,000.00	9,000.00	0.00	9,000.00	0.00	0.00
4500	Equipment	5,341.83	0.00	22.08	22.08	43,804.08	43,804.08	38,484.33	5,319.75	0.00	38,484.33
5100	Other Direct Costs	14,576.28	0.00	318.17	318.17	60,150.00	60,150.00	45,891.91	14,258.09	0.00	45,891.91
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66,040.54	66,040.54
150368-1-02-03	Total	2,273,714.77	1,081.18	80,461.53	81,542.71	2,887,782.26	2,887,782.26	695,610.20	2,192,172.06	66,040.54	761,650.74
150368-1-51-01	Project Management	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	87.20	19,356.48	9,775.02	29,131.50	38,122.88	38,122.88	67,166.98	(29,044.30)	0.00	67,166.98
1500	Local Travel	0.00	0.01	2,426.34	2,426.35	4,746.30	4,746.30	7,172.85	(2,426.35)	0.00	7,172.85
1700	Nat Consult./Staff	100,693.77	13,419.59	26,294.88	39,714.27	291,357.44	291,357.44	230,377.94	60,979.50	0.00	230,377.94
5100	Other Direct Costs	(818.08)	0.00	409.12	409.12	5,583.72	5,583.72	6,590.92	(1,027.20)	0.00	6,590.92
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29,514.86	29,514.86
150368-1-51-01	Total	100,162.89	32,776.08	38,905.16	71,681.24	338,790.14	338,790.14	311,308.49	28,481.65	29,514.86	340,823.35
150368-1-53-01	Evaluation	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	45,220.21	0.00	0.00	0.00	60,000.00	60,000.00	14,779.79	45,220.21	0.00	14,779.79
1500	Local Travel	9,000.00	0.00	0.00	0.00	9,000.00	9,000.00	0.00	9,000.00	0.00	0.00
1700	Nat Consult./Staff	32,954.39	0.00	0.00	0.00	38,850.00	38,850.00	5,895.64	32,954.39	0.00	5,895.64
3000	Train/Fellowship/Study	11,900.00	0.00	0.00	0.00	11,900.00	11,900.00	0.00	11,900.00	0.00	0.00
5100	Other Direct Costs	87.08	0.00	0.00	0.00	100.00	100.00	12.92	87.08	0.00	12.92
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,965.43	1,965.43
150368-1-53-01	Total	99,161.65	0.00	0.00	0.00	119,850.00	119,850.00	20,688.35	99,161.65	1,965.43	22,653.78
150368	Total	2,759,517.12	58,404.30	140,845.32	189,249.62	3,953,250.00	3,953,250.00	1,392,982.50	2,560,267.50	132,342.72	1,525,325.22
2000003881	USD Total	2,759,517.12	58,404.30	140,845.32	189,249.62	3,953,250.00	3,953,250.00	1,392,982.50	2,560,267.50	132,342.72	1,525,325.22

IX. Work Plan and Budget

1. Please provide an **updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

Outputs by Project Component	2023				2024				GEF Grant Budget Available (US\$)
	Q ₁	Q ₂	Q ₃	Q ₄	Q ₁	Q ₂	Q ₃	Q ₄	
Output 1.1.1: National PCB regulations are in line with international standards									24,245
Output 1.1.2: National PCB management Centre established to support PCB owners to properly manage and dispose of PCBs and related wastes									0
Output 1.1.3: National data system set and analytical services strengthened to fully support inventory and management of PCBs and related wastes, in line with international standards and best practices									26,939
Output 1.1.4: Hazmat and risk management trainings conducted and awareness raised to reduce exposure to workers and the general public to PCB and related toxic wastes									107,755
Output 1.2.1: Inventory of at least 10,000 PCB-containing equipment units and PCB wastes carried out, including sampling in oil and soils and with sound analytical methodologies									62,841
Output 1.2.2: ESM and disposal plan for PCBs developed, including cost- effective disposal options									17,954
Output 1.2.3: Assessment of PCB/u-POPs pollution due to fire on ANDE PCB-storage facilities									718
Output 1.3.1: Current PCB interim storage facilities upgraded and operational									

Output 1.3.2: At least 700 metric tonnes of PCB-containing equipment and waste disposed of and/or decontaminated										2,192,172.06
Output 150368-1-53-01: Monitoring and Evaluation (including terminal evaluation)										99,161.65
150368-1-51-01 – Project Management:										28,481.65

X. Synergies

1. Synergies achieved:

N/A

3. Stories to be shared (Optional)

XI. GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate.

Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com>

Please see the Geocoding User Guide by clicking [here](#)

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Ministry of Environment and Sustainable Development (MADES), Paraguay	-25.2644253	-57.5505513		Project office
Substation ANDE Laurely, Paraguay	-25.3213887	-57.5118543		PCB special deposits

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2022 – 30 June 2023.
2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
4. **Results-based management:** The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings	
Highly Satisfactory (HS)	Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”.
Satisfactory (S)	Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.
Moderately Satisfactory (MS)	Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.
Moderately Unsatisfactory (MU)	Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives.
Unsatisfactory (U)	Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)	
Highly Satisfactory (HS)	Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as “good practice”.
Satisfactory (S)	Implementation of <u>most</u> components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.
Moderately Satisfactory (MS)	Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
Moderately Unsatisfactory (MU)	Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action.
Unsatisfactory (U)	Implementation of <u>most</u> components in <u>not</u> in substantial compliance with the original/formally revised plan.
Highly Unsatisfactory (HU)	Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan.

Risk ratings	
Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
High Risk (H)	There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks.
Moderate Risk (M)	There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.
Low Risk (L)	There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks.