Annex 13. Management Response Template

Management response to the Midterm Review (FSP Environmentally Sound Management

and Destruction of PCBs in Mexico: Second Stage - Mid Term Review)¹

 Project Title:
 FSP Environmentally Sound Management and Destruction of PCBs in

 Mexico:
 Second Stage.

 Project PIMS #: 5479
 GEF Project ID (PMIS) #: 000 9214

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Context, background, and findings²

- The project, "Environmentally Sound Management and Destruction of PCBs³ in Mexico: Second Phase", corresponds to the continuation of the project "Environmentally Sound Management and Destruction of Polychlorinated Biphenyls in Mexico", which was implemented during the 2009-2015 period. This second phase of the project (February 2019-December 2023) seeks to minimize the risk of exposure of Polychlorinated Biphenyls (PCBs) to humans and the environment, while promoting Mexico's timely compliance with the requirements of the Stockholm Convention for the management of PCBs. To date (year 2022), the project is in its third year of execution out of a total of five years, with support from the GEF of US\$4.8 million and an expected total investment of more than US\$25 million. Given that this is a Mid-Term Review (MTR), the diagnostic focuses on detecting opportunities for improvement.
- 2. In the first phase of the project, results were obtained in the management and elimination of PCBs, in particular, the identification of an inventory. Based on this

¹ This template is in alignment with the <u>Management Response Template</u> for UNDP project-level evaluations in the Evaluation Resource Centre.

² Hernán Reyes G. (International Consultant) & Marisol Sánchez A. (National Consultant). Midterm Evaluation of the Project: "FSP Environmentally Sound Management and Destruction of PCBs in Mexico: Second Stage". Mexico, April 2022.

³ The acronym in plural will only be considered in the name of the project.

information, it was determined that 37,667 tons of oil and equipment containing PCB (approximately 120,000 transformers) still existed in the country; of these, it is estimated that a little more than 6,000 tons have been eliminated and about 31,658 tons remain to be destroyed. In the second phase of the project (2019-2023), it was proposed to destroy 5,000 tons of PCBs, in a time horizon between 2019-2023. With this action, it is expected to benefit 1,000 workers who currently have direct contact with contaminating sources through electrical installations in the country and 500 people with potential contact through contaminated transformers.

Conclusions and Recommendations:⁴

- 3. The problem that gives rise to the project, "minimizing the risk of exposure to PCB in humans and the environment", is clearly defined in PRODOC. The justification for this need comes from the Stockholm Convention⁵ COP. In this international meeting, it was recognized and agreed that these pollutants have toxic and harmful properties for human health. As a result of this fact, Mexico joined the requirements (of the COP-2004-Stockholm) for the management of PCBs. The development of this project is consistent with the Stockholm Convention, to the extent that it seeks to provide the country with technical and management tools to treat PCB in an environmentally sound manner.
- 4. In the first phase of the project (results were obtained in the management and elimination of PCBs, in particular, the projection of an inventory. Based on this information, it was determined that there were still 37,667 tons of oil and equipment containing PCB in the country (approximately 120,000 transformers), of which it is estimated that a little more than 6,000 tons have been eliminated and about 31,658 tons remain to be destroyed. In the second phase of the project (2019-2023), it was proposed to destroy 5,000 tons of PCB in a time horizon between 2019 and 2021. With this action, it is expected to benefit one thousand workers who currently have direct contact with contaminating sources through electrical installations in the country and five hundred people with potential contact through contaminated transformers.

Evaluation of the Project Design:

5. Regarding the project design, the general objective is specific, responds to a real need, and is theoretically achievable within the timeframe of the project. The results of the application of the logical framework consistency analysis through the SMART Evaluation Matrix show that: I) the components are well defined, which implies that the achievement of the results of each component would allow the achievement of the

⁴ Hernán Reyes G. (International Consultant) & Marisol Sánchez A. (National Consultant). Midterm Evaluation of the Project: "FSP Environmentally Sound Management and Destruction of PCBs in Mexico: Second Stage". Mexico, April 2022.

⁵ Signed on May 22, 2001, ratification was approved by the Senate on October 17, 2002, and the Secretariat of the Convention was notified in February 2003. The Convention entered into force in May 2004.

project's general objective; II) the four components are 100% specific, 96% measurable and with a 72% consistency level with respect to the indicators and goals proposed.

- 6. When analyzing the consistency at the component level and its expected results, the degree to which the project's objective can be satisfied if the products are achieved is measured, under an analysis criterion that responds to qualifications of: relevance, satisfaction of the objective and density. The results obtained in this matrix indicate that the level of consistency between the components and the expected results is 67%. Although this is an important degree of consistency, a higher percentage was not obtained due to the fact that the project design (at the component level) did not include products and indicators in the management areas. In this evaluation, management products and indicators are considered indispensable, as they allow monitoring the execution of each specific objective within the planned timeframe.
- 7. In summary, overall, the project is well designed, responds to a real need, the components and expected results are relevant, and the indicators, as well as their measurement parameters, have some weaknesses as seen in the SMART analysis but are functional to the project. Therefore, in terms of design, an improvement in the overall consistency of the project would be achieved by improving some indicators, better drafting the relationship between components and products and finally incorporating at the component level- results and management indicators.
- 8. In environmental terms, the fact that this project is consistent with the Stockholm convention and supports the SDGs stands out positively. The main socioeconomic benefit of the project emanates from the elimination of PCB emissions from electrical transformers and their environmentally sound destruction that negatively impact biological resources, including human health. This also influences the financial burden of the public health system, maternal health (pregnant women), and the general health of the population.

Evaluation of project results:

- 9. According to information provided in the 2021 IRP, the project has reported a total of 432 MT of PCB destroyed by the CFE, the CFE maintains 157 MT of equipment contaminated with PCB that are still in operation, and given that the goal for the year 2021 was to eliminate 2,000 MT of PCB, the project is far behind schedule.
- 10. The consistency analysis of the logical framework carried out with the Smart Matrix tools shows that compliance with all of the project's goals is Unsatisfactory, with a score of 1.5 on a scale of 1 to 6 (where 6 is the maximum). Of the four Components: two of them obtain a rating of Very Unsatisfactory, which is equivalent to a rating of 1

(Components 2 and 3); and two Components obtain a rating of Unsatisfactory, which implies a rating of 2 (Components 1 and 4).

- 11. The above results are related to the fact that the achievement of the activities of a component is concatenated with the rest of the components. In this case, the start of the project and its continuity depended heavily on the timely fulfillment of two unavoidable products of the project: i) to have an updated inventory without which PCB elimination operations cannot be carried out and ii) to have the SISG operational, a crucial aspect to guarantee competitive prices and the establishment of a sustainable model over time. Given that these two central products of the project -to date- are not operational, a rating of Insufficient is justified for the project's achievement. The above does not imply that the rest of the products are not relevant for the successful outcome of the project, but rather that sequentially the above-mentioned products mark the beginning of the project.
- 12. For each component, assumptions (or minimum conditions) were defined under which it was possible to obtain the expected results; in general, the assumptions were not met, which is consistent with the results obtained (project rated as Unsatisfactory). These assumptions reflect absolutely indispensable conditions for the materialization and progress of the project such as: (i) that the management SISG was in place; (ii) to have information about PCB holders; (iii) that the NOM-133-SEMARNAT-2015 implementation program was in full execution; (iv) that the financing mechanism was designed; (v) that the project would be executed on time as planned; vi) that there was political support from the Ministry of Environment; vii) that the Project Coordination Unit and UNDP met all GEF M&E requirements within the planned timeframe; viii) and that existing knowledge platforms were used to share the information gathered.
- 13. During the 2019-2021 period, the project was unable to create the mechanisms to address the main barriers existing in Mexico for an adequate and cost-effective environmental destruction of PCBs, these can be summarized as: i) the lack of coordination with PCB holders to achieve adequate waste management and face the costs of transportation logistics; ii) the lack of reliable facilities and their destruction processes; iii) and the low level of knowledge about NOM-133-SEMARNAT-2015 by PCB holders, waste owners and maintenance companies. The above is fully consistent with the low results obtained.
- 14. In the present evaluation it is observed that, the project presents advances in the realization of a series of activities tending to the fulfillment of the goal such as: (i) studies on the legal model and design (corporate purpose) to register the SISG's Civil Society; (ii) drafting of the TOR for the definition of advice regarding the formal structure that the SISG should have; (iii) preparation of a brochure on the SISG and which was distributed

to different stakeholders to promote the system's services; (iv) awareness raising with stakeholders to encourage their participation in the incorporation of NOM-133-SEMARNAT-2015, training and management of PCBs; (v) training to 100 inspectors; (vi) development of TOR of technical and economic evaluation consultancy to improve the operations of two existing companies and their certification; (vii) electrical maintenance workshops were invited to participate in the SISG and include in their services the processes of backwashing contaminated equipment; (vii) worked on the process of reducing the risk of cross contamination of equipment with PCB and contaminated waste in maintenance workshops; (viii) search and establishment of agreements with the private and public sector to identify transformers, perform chemical sampling, and determine their disposal; (ix) preparation of reports according to agreed TOR. Although the completion of all these activities represents progress, the significant delays with respect to the planned timeframe determine that the project's achievement at the date of this evaluation is Unsatisfactory.

- 15. In the opinion of this evaluation, the fact that Mexico has NOM-133- SERMARNAT- 2015 applicable to all electrical equipment in use and discarded, is a facilitator for the objectives of the topic and the project. However, PROFEPA maintains that its application is insufficient. In addition, according to the evaluation conducted in the first phase of this project, some PCB management companies have permits that do not have an expiration date, which implies that their operation cannot be cancelled. Therefore, these companies operate (and will continue to operate) in an environmentally inadequate manner.
- 16. In this evaluation, it is relevant to take into consideration the situation of small and medium sized companies, a high percentage of which have contaminated equipment and face difficulties in terms of costs to carry out an environmentally adequate management of PCBs. The project notes that out of a total of 1,000 electrical maintenance workshops in the country, only fifteen of them are certified. The project addresses this reality through the product: generation of a SISG, whose delay in its operation has already been pointed out.
- 17. Regarding the barrier faced by the project in terms of the lack of reliable facilities and the low level of knowledge of the Standard, the project addresses the problem by contemplating the creation of a public-private mechanism for the sustainable management and disposal of PCB in a business model that includes the participation, supervision and support of the government. This model would finance the promotion of public-private services for PCB disposal, and inspection campaigns, monitoring and training of inspectors for the enforcement of NOM-133-SEMARNAT-2015. Therefore, it is desirable that its operation is implemented as soon as possible.

18. In terms of progress in cross-cutting issues, it is worth noting that the project has prepared the GAP, which is a very complete document and frames the incorporation of gender aspects in the four components; the Project should incorporate these actions in the planning and activities developed and include the gender indicators proposed in the document.

Evaluation of project management:

- 19. Although there is no documented information on the specific difficulties that explain the management problems faced by the project (beyond those indicated by the effect of the Covid-19 pandemic), the results of the evaluation show that the expected goals were not achieved mainly due to problems of governance and project management.
- 20. In the interviews it is clearly evident that there is no teamwork, that there are no regular meetings, that solutions are not sought jointly, that there is no leadership of the coordinator to guide them where to look, that there is no systematic collection of information and evidence to make decisions on which paths to follow and which paths to abandon definitively. The coordinator had to coordinate two projects at the same time, which required a lot of dedication to meet the demands of the COPs project in its last phase and to be able to close the project, which did not allow him to develop an adaptive strategy.
- 21. The PIR reports point out the following difficulties with respect to management: the need to establish weekly follow-up meetings with all key project coordination bodies; the change of project coordinator 18 months ago; that there is a suspicion that the official PCB inventory, such as the quantities that have been destroyed, were not correctly reported; and that to date only 10% of the financial resources have been spent.
- 22. It is necessary to point out that precisely at the beginning of 2022 the Project is depending on the information of a consultancy hired (by the project) to provide guidance on where the contaminated electrical equipment is located and also to give some guidelines to tell if the goal of 5,000 tons is possible to achieve or not. It can be understood that the year 2019 is always difficult to start, then during the year 2020 the pandemic crisis was paralyzing, and then the year 2021 is over and the diagnosis of how it is not known where the contaminated equipment is located remains and that the management system has to be promoted, it means that the activities are starting over and there has not really been an adaptive management.
- 23. The monitoring and performance evaluation reports⁶ consistently point out that there is poor performance and that measures must be taken; the diagnosis from the

⁶ Information from PIRs, PDP reports, CDRs, Quarterly Reports, PDAs, project materials and interviews.

coordination unit is the same: a) Stage I had the guarantee of linking with an institution that had the contaminated equipment and was willing to work with them, there was no effort to look for them, instead now they are scattered and hidden, b) in the transition valuable information was lost of where the contaminating equipment is located, c) the pandemic prevented to make awareness meetings that are more effective than internet meetings, d) private companies faced with the problem of contaminating equipment postpone the decision to the maximum until they are not forced to comply with a legal obligation due to economic costs.

- 24. All these arguments are valid; thus, they must be faced and decisions must be made to make progress in achieving the objectives, to gather information that allows modifying the goals and even part of the objectives and also to reorient the efficient use of resources, to try other options or to detect that the way forward is to redefine strategy, not only to adapt the components. In other words, there has been no adaptive management, no decisions have been made to overcome the problems, the PCU team has continued with no modifications, there have been no PB meetings that show a real concern or sense of urgency to move forward with this task, there have been no changes in budget items that demonstrate the search for other options.
- 25. Therefore, the capacity to make decisions and have an adaptive management has been the great weakness of the PCU management and also of the governance at the PB level with the two main partners which are SEMARNAT and UNDP that should have moved from claiming to action, tightening control and follow-up, to the PCU execution and helping especially SEMARNAT, ordering the execution of linked actions of its dependencies with PCU personnel.
- 26. Within the gender analysis, the project design identifies women and men as project beneficiaries, and the project also differentiates how men, women, and children are exposed differently due to their work roles and, in several concentrations, mainly due to biological differences. PRODOC states that it will ensure the participation of women in activities related to training and capacity building, and that the greatest improvement for women will be the reduction of the risk of contaminants.
- 27. The mechanisms that the project has developed to ensure that women are included has been the development of the GAP, being a specific document of the project and focused on including the participation of women, reducing the risk of PCB contamination and improving their quality of life, the GAP defines the baseline, objectives and indicators of achievement in gender aspects and an Intervention Plan where it points out 4 proposals: 1) Analysis of sensitive sites, 2) Advocacy in certification processes, 3) Raising awareness on the importance of including the gender perspective and 4) Research on PCB with a gender approach in Mexico, the plan has specific activities by component and

the tools that facilitate the work such as methodological guides, infographics and awareness tutorials.

- 28. It should be noted that within the GAP, a participatory survey was conducted to establish the baseline and at the same time identify interests and proposals on gender and chemicals issues with key stakeholder groups, such as academic institutions, companies, civil servants and officials, with the participation of 76 interviewees.
- 29. The project is collecting data disaggregated by sex, an affirmative action that supports the visibility of women. Regarding training, in 2019, 95 PROFEPA inspectors (32 women and 63 men) were trained on gender perspective and its links with the management of hazardous chemical products.
- 30. Both PRODOC and the GAP emphasize that men have the highest direct exposure to PCB in the industrial sector, which is where most men participate; under this view, it has been shown that there are routes of indirect exposure to toxic substances where women and men can be affected in different ways, such as schools, water wells, parks, among others. The project's affirmative action's such as the GAP, specific training on gender issues, respond to the principle of leaving no one behind and establish general guidelines on how to approach the project from the perspective of gender equity and equality, as a right to equal and equitable participation; the project should implement the intervention plan from the POA planning and incorporate the activities by component. Likewise, the Country Office has a gender focal point that will be essential to ensure the implementation of cross-cutting issues and that the project can benefit men and women within a framework of equity, gender equality and human rights.
- 31. The project's contribution to the UNDAF (2017), is aligned to its principle of "Leave no one behind", visualizing how PCB differentially affect men and women. Another of the UNDAF principles that the project aligns with is "Gender Human Rights and Women's Empowerment", the GAP, explicitly points out the root causes of inequalities and promotes the participation of women in each of the components with its Intervention Plan, the challenge of the project lies in including the specific actions emanating from the GAP.
- 32. Within the Program Document for Mexico (CPD) 2014-2018 and extended to 2019, the project contributes to Outcome No.6, to its national objective of achieving a prosperous Mexico. In its priority area of environmental sustainability, the document also prioritizes equality, inclusion and equity as a premise to achieve its national objective of achieving an inclusive Mexico.

- 33. The UNDP Gender Equality Strategy (2018-2021) emphasizes that gender equality as a fundamental human right is a fundamental and necessary basis for a peaceful, prosperous and sustainable world, being important for the achievement of the 2030 Agenda and the SDGs, the development of the GAP comes to promote the principles of equality and nondiscrimination and to the extent of its implementation will contribute directly to SDG 5, on gender equality and women's empowerment. Likewise, strategies and action plans to empower women, leave no one behind and reduce inequalities have ample room for improvement, specifically to implement affirmative actions to achieve these objectives.
- 34. Regarding the difficulties related to the pandemic, it is noted in the PIR reports that the project team has adapted to a virtual implementation model carried out through the platforms that UNDP is providing for project execution, but in practice this has yielded very few results to date.
- 35. Based on the background information provided, it can be concluded that the project was developed within a framework of institutional difficulties, with the absence of an efficient and effective management strategy. Therefore, the governance and management policy aspects constitute the main problem faced by the project, and these constitute the great challenge for the future continuity of the project.

Recommendations and management response

The PCU agrees on the Midterm Evaluation Recommendations and propose the next management response listed below:

Recommendation by Component

Component 1: Strengthening the market base and enforcement of regulations for the sustainable disposal of PCB

Key Recommendation 1.

Based on the results of the SISG consultancy, establish an action plan to launch the system in harmony with the communications plan with events that will put the PCB issue on the media's agenda and serve to relaunch the project. Ensure that the SISG has a management and work agenda whose priority axis allows it to become the relevant actor in the PCB issue, assume a facilitator role for the destruction of pollutants supporting financing searches, information of holders, approaching viable technical offers, speeding up an exhaustive mapping of contaminated equipment, improving collection logistics, guaranteeing competitive prices and showing that it is possible, necessary and urgent to have in Mexico an organization that ensures in a sustainable and optimized way, the disposal of PCB stockpiles.

Key Recommendation 1.

Management Response:

In accordance to the recommendations made to the Project as result of the evaluation, there has been developed a draft strategy for the project relaunching. The New Strategy Project has been prepared to achieve the proposed goals.

The restructuring proposal is awaiting authorization from the Project Board:

- Maintain a continue monitoring to identify PCB contaminated equipment. The development of the inventory aims to identify potentially contaminated transformers for its treatment and elimination. Therefore, it is not sought to integrate a specific record of all contaminated transformers at the national level.
- Certify 100 Workshops trained in Good Practices for the Management and Elimination of PCB.
- Training of workshops for the implementation of the backwash service as part of the strengthening of the national infrastructure.
- Promotes the implementation of a PCB New Elimination System that will strengthen the national elimination infrastructure.
- Implement a Communication Strategy of the Project and the Integrated System of Management Services, to attract possible financing schemes and reduction in disposal costs.

The Integrated System of Management Services is in the process of be legally registered as an NGO and in the definition of the activities that will be implemented to strengthen the PCB management and elimination process. The NGO operation has the objective of facilitate the role for the destruction of PCBs, search for financing, integration of workshops or companies that are dedicated to collection, environmentally adequate destruction of contaminants with cost-effective prices in the market, as well as the promotion of backwashing in equipment that requires it, among others.

It is likely that may be needed a one-year project extension to reach the goals marked in the PRODOC.

Koy Action(c)	Time	Responsible		Tracking
Key Action(s)	Frame	Unit(s)	Status	Comments
1. Design a flexible				The restructuring of the
financial	February	SEMARNAT-	Not	Project will make possible the
mechanism that can	2023	Project Board	Initiated	identification of the costs
evolve ⁷ and grow				updated to inflation and after

⁷ This mechanism must evolve with the project's strategy: Today there are only limited subsidy resources, but results must be shown, so a greater subsidy should be given to companies that can carry out eliminations and be able to show this work in terms of communication. A guarantee and guarantee fund are a simple mechanism, it is not very costly and allows, from an amount that is left on deposit, to multiply the access to financial resources available for elimination. There are other cooperation institutions that are sensitive to supporting issues (gender, indigenous peoples, health, education, etc.) with which agreements can be reached to supplement special subsidy funds. Also, with this same logic, special lines can be set up for regions, localities or ecologically sensitive areas for which resources can be leveraged. In addition, the financial lines

Key Recommendation	n 1.	
over time, to which		the effects of the pandemic in
other lines of		a much certain way, the
support can be		development of new
added with other		infrastructure, as well as the
financiers that can		identification and
be added over		improvement of the available
time, such as:		infrastructure for the
general subsidy,		treatment, management and
subsidy by special		environmentally adequate
sector, subsidy		disposal of PCBs, the design of
differentiated by		strategic routes and the
volume, subsidy by		possible reductions of costs as
company,		well as the possible sources of
guarantee and		financing. With which it will be
guarantee fund,		possible to identify the most
lines of credit		effective financing structure
differentiated by		for the collection, treatment
localities or		and disposal of PCBs.
economic sectors of		
interest.		

Component 2. Improvement of PCB Management Services and Certification of Destruction Facilities.

Key Recommendation 2.

Conduct a feasibility study on the minimum conditions (operating volume and/or subsidies) that would allow SEM-TREDI (or another company) to make the decision to operate by executing elimination actions in Mexico, so that the System can make these conditions viable and ultimately have lower prices.

Management Response:

The redesign of the Project for its relaunch, considers the development of different actors that can provide PCB management and elimination services, which once it comes into operation jointly with the Integrated System of Management Services, will allow knowing the new prices considering inflation and the effects of the pandemic.

On the other hand, it is advisable not to mention any company, since as a public administration authority, it should be impartial and not give preference of any kind (in this case, commercial) to a company., so it is considered that with the development of the market itself and the

can be linked to programs to support small and medium-sized enterprises or to promote technological innovation supported by other multilateral financial institutions (IDB, World Bank).

Key Recommendation 2.

necessary infrastructure, the prices will be reduced and adjusted according to the supply and demand of services.

Koy Action(s)	Time	Responsible	Tracking		
Key Action(s)	Frame	Unit(s)	Status	Comments	
1. Ensure that the certification process for electrical maintenance workshops is completed and conduct an analysis of the experience with the first 25-30 workshops to serve as a demonstration effect and microsuccessful communication.	June 2023	SEMARNAT- PCU	Initiated	The 25 workshops that were certified in the first stage have been contacted to corroborate their interest in establishing a protocol of activities for the implementation of good practices in operation in companies and workshops dedicated to the maintenance, repair and/or manufacture of transformers. as well as the dielectric oil refining service in transformers. As of June 2022, 13 workshops are in the process of training for the implementation of good practices, and 12 more are waiting for its training. Additionally, as part of the restructuring of the project for its relaunch, the extension of the contract for the training of workshops in good practices in the management of PCB is contemplated, with which the 100 Certified Maintenance Workshops goal would be reached	
2. Incorporate in the 2022 and 2023 plan goals for workshop certification to ensure that PRODOC goals are achieved.	June 2023	SEMARNAT- PCU	Initiated	The 2022 work plan is scheduled to Implement the good practice maintenance workshop certification program in at least 25 Workshops however in the relaunch project design that is in process of be approved by the project board in the next days is considerate the extension of the contract for the training of	

Key Recommendation 2.					
				workshops, to comply with the 100 Certified Maintenance Workshops goal would be reached.	
3. Develop an asynchronous virtual platform to achieve greater reach in the replication of workshops and training courses with national scope.	June 2023	PCU	Not Initiated	Management Services is implemented, and continues with the training for the certification in good practices of PCB management of the maintenance workshops, this service will be integrated as part of the System services offer. The System which will be responsible for promoting, training and awareness workshops, in addition to providing advisory for the implementation of the PCB backwashing and destruction services. The project's relaunch strategy considers, as part of the Communication strategy the release and divulgation of the project and the system, the development of an internet page, which allows promoting the workshops that have been certified in good practices, as well as the services of the training courses for new workshops certification that the System will offer as part of its services.	

Component 3. Destruction of identified PCB banks.

Key Recommendation 3.

Define a parallel strategy to the consultancy in charge of sampling, as a proactive alternative that allows a greater involvement of the private sector in the identification of contaminated equipment with the promotion of subsidies, which are mentioned below.

Management Response:

The strategy for relaunching the project considers extending the contract and the number of sampled transformers with the company that currently carries out the ratification of the inventory, which has the objective of identifying contaminated transformers that require treatment and/or elimination.

In parallel, the Ministry of the Environment coordinated work continues through PROFEPA with the Technical Visits that has carried out more than 300 samplings during 2020 and 2021 and scheduled for 2022 to carry out 250 additional visits.

Likewise, through the elimination company, the laboratory analyzes of the companies that have shown some interest in the elimination of their PCB contaminated transformers continue. This joint work is expected to be reinforced through the training of maintenance workshops in good practices, as well as the implementation of backwash systems in the different electrical maintenance workshops.

There has been identified that there are not many PCB contaminated transformers with concentrations over the 50 ppm that is considerate only for destruction. However, a larger volume of transformants with concentrations below 50 ppm has been identified, which could be treated through a backwash process. The development of backwash infrastructure could encourage price reductions due to the transportation costs of the existing equipment for this process.

Koy Action(s)	Time	Responsible	Tracking		
Rey Action(s)	Frame	Unit(s)	Status Comments		
1. Evaluate the more intensive use of backwashing as a lower cost solution, and incorporate this information into the review of future components and results for project continuity.	June 2023	SEMARNAT- PCU	Not Initiated	With the results provided by the consulting company in charge of the rectification/ratification of the inventory, is considerate that is necessary to extend the contract and the number of sampled transformers with the company that currently carries out the ratification of the inventory, which has the objective of identifying	

		contaminated	transformers
		with concentration	on of PCB that
		vary from the 0.0	1 ppm to pure
		PCB. Identifying a	as an emerging
		problem that the	e dilution and
		cross contaminat	ion effect, that
		has been identif	ied during the
		inventory.	
		With this informa	ation has been
		identified the nee	ed to develop a
		variety of servic	e providers of
		backwashing, to	make more
		affordable t	he proper
		management and	d treatment of
		the contaminated	d PCB oils.

Component 4. Identification of lessons learned, monitoring and evaluation.

Key recommendation 4.

Establish an agreement with a university for project knowledge management that generates information linked to disseminating lessons learned, achievements, successes and knowledge of the project.

Management Response:

As part of the restructuring of the project for its relaunch, one of the essential parts is considerate to be the development and implementation of a communication strategy for the project and the Integrated System of Management Services. In the implementation of the System Research Centers and Institutes from several Universities, are considerate as a key player in the promotion and investigation of new PCB destruction processes.

Koy Action(c)	Timo Eramo	Responsible		Tracking
Rey Action(s)	Time Frame	Unit(s)	Status	Comments
1.A communication strategy should be developed to document lessons learned and publish experiences or case studies that can be edited throughout the remainder of the project and develop a	December 2023	SEMARNAT- PCU	Not Initiated	The restructuring of the project for its relaunch, considerate as one of the essential parts to be the developed and implemented the communication strategy for the project and the Integrated

dynamic online PPM	System of
manual for monitoring.	Management Services
	that will have the
	objective of promote
	de System services,
	relevant information
	for the society, the
	diffusion of the good
	practices certified
	workshops, the
	environmentally
	approved elimination
	services, and the
	capacity building
	available for the
	different players.

> Project implementation and adaptive management

Key Recommendation 5.

SEMARNAT-UNDP Commitment: Formally ratify the interest of both institutions to support with a sense of urgency, involving oversight of the coordinating unit, delivery of strategic guidance, assisting with relationships and connections, and active participation in the project board monthly or bi-monthly during 2022 and quarterly or when relevant in 2023 to ensure timely management decisions and engagement of key stakeholders.

Management Response:

The commitment of the Secretariat of the Environment and Natural Resources and the UNDP, has been evident. A full restructuring of the PNUD team in charge of developing the project has been carried out, with the hiring in process of the new Coordinator and three Technical Specialists who will strengthen the development of the project.

On the part of SEMARNAT, there was a change of the General Director of the Area responsible for the project, however, the new General Director, in addition to having extensive experience in the management of polluting chemical substances, has shown an important interest in the subject, designating one of its Area Directors to collaborate directly with the UNDP team, in addition to having designated spaces in the Secretariat building, which facilitates coordinated work.

Additionally, PROFEPA, which is a decentralized body of SEMARNAT itself, has maintained an active participation through technical visits and on-site colorimetric tests for the identification of contaminated transformers, which has made it possible to advance in a coordinated manner

Key Recommendation 5.

with the contractor company in charge of the ratification of the inventory and sampling of potentially contaminated transformers.

Key Action(s)	Time	Responsible	Tracking		
Rey Action(s)	Frame	Unit(s)	Status	Comments	
 Elaborate a Project Closure Plan by December 2023 in 2 stages: a) 2022 Plan with monthly detail and quarterly targets. It must demonstrate that it is possible to achieve an exponential growth plan for the detection of PCB generators. 	December 2022	PCU	Initiated	In the next Project Meeting, the progress of the 2022 work plan will be reviewed to promote the pending activities in the last quarter of 2022.	
b) Plan 2023 with monthly detail and quarterly goals showing successes especially during the first half of the year and not waiting for the closing of the project.	February 2023	PCU	Not Initiated	In the last quarter of 2022, the 2023 Work Plan will be prepared, with the format established by the UNDP Country Office.	
2. Systematize all the current information on who are the holders of PCB and what is the real existing volume in Mexico in order to rethink not only the change of the global goal of 5,000 MT eliminated, but also to make a proposal of goals that show a relevant qualitative impact. That is to say, to redefine goals that show elimination in highly sensitive sectors due to the risk of contamination or propagation, elimination of XYZ tons of localities or of an economic sector linked to conditions of vulnerability due to poverty or environmental vulnerability.	April 2023	PCU	Not Initiated	The restructuring of the project for its relaunch, considerate as one the key activities to maintain a continue monitoring to identify PCB contaminated equipment. The development of the inventory aims to identify potentially contaminated transformers for its treatment and elimination. Therefore, it is not sought to integrate a specific record of all contaminated transformers at the national level. The strategy for relaunching the project	

Key Recommendation 5.

This targeting action would also make it possible to demonstrate the value and importance of the efforts made and not only that the goal is quantitative. This would make it possible to rethink strategies, goals and recommendations for effective action. This study should serve for the improvement of the Project Closure Plan. The consultancy that is being carried out to detect that companies could contain PCB could be very useful in this regard. This would also help to better understand how to strengthen the project's actions and how to better orient PROFEPA's inspection actions.

considers extending the contract and the number of sampled transformers with the company that currently carries out the ratification of the inventory, which has the objective of identifying contaminated transformers that require treatment and/or elimination.

In parallel, the Ministry of the Environment coordinated work continues through PROFEPA with the Technical Visits that has carried out more than 300 samplings during 2020 and 2021 and scheduled for 2022 to carry out 250 additional visits.

Likewise, through the elimination company, the laboratory analyzes of the companies that have shown some interest in the elimination of their PCB contaminated transformers continue. This joint work is expected to be reinforced through the training of maintenance workshops in good practices, as well as the implementation of backwash systems in the different electrical maintenance workshops.

Key Recommendation 5.				
				Finally, there is no possible to make a modification of a PRODOC goals accordingly with the PNUD and GEF alignments, so the project will be focused in the areas identifies as highly sensitive or with high risk of contamination.
3. It must be shown that important achievements have been made and that it is more efficient to extend the project to show spectacular results given the growth curve in achievements, therefore special emphasis must be placed on measuring the process of progress in achieving the results as of 2022. The construction of a system of early warning indicators that will allow quick decisions to be made on confirmation management and commitment to action for the treatment of elements of the project.	June 2023	SEMARNAT- PCU	Not Initiated	The new strategy for the relaunching of the project is focused on promoting the elimination of PCB, through the activities of the identification of equipment contaminated with PCBs, through extending the sampling contract to allows refinement of the inventory, which has as its objective the identification of transformers contaminated with PCBs. Also, with the strengthening of the infrastructure for the treatment and elimination of PCBs, through the certification of electrical maintenance workshops in the implementation of pCBs, through the implementation of pCBs, the implementation o

Key Recommendation 5.		
		workshops and the
		implementation of a new
		PCB disposal
		infrastructure.
		The implementation of
		the Integrated System and
		Management Services
		that will allow to be a
		communication bridge
		between the owners of
		equipment contaminated
		with PCBs, the
		Government Federal and
		local governments,
		sampling and analysis
		companies and PCB
		treatment and
		destruction companies.
		Inose activities will be
		Supported by the
		that will make it possible
		to publicize all the
		activities carried out by
		the project as well as
		promote the different
		service companies that
		comply with the different
		legal guidelines in
		addition to being certified
		in good practices in the
		management and
		elimination of PCB.
		However, it is important
		to consider that due to the
		restructuring process of
		the team in charge of
		implementing the project,
		as well as the changes in
		SEMARNAT, it is very likely

Key Recommendation 5.				
				that the project will require an extension of one year to achieve the goals. established in the PRODOC. A full restructuring of the Project Coordination Unit
4. Restructuring of the Project Coordination Unit: The Management of the Coordinating Unit must have an effective leadership role in the Unit, guiding, showing creative alternatives, encouraging the search for solutions, exercising an adaptive management with a sense of urgency. He/she must be in the field looking for agreements and seeing where bottlenecks occur in order to invent creative solutions. Must support the organization of the team's time to be collectively efficient.	December 2022	Project Board	Initiated	has been carried out, with the hiring in process of the new Coordinator and three Technical Specialists who will strengthen the development of the project. During this process, it has been considered as a very important matter that the participants of the new Coordinating Unit have extensive experience in the implementation of projects, as well as in the promotion of services, to encourages the conclusion of the implementation of the project and accelerate. the achievement of the established goals.

> Sustainability

Key Recommendation 6.

Elaborate an awareness and communication plan that gives visibility to the PCB problem and encourages it to be reinforced with very clear and sequential communication milestone:

- Conformation of the SSIG: Major agreement to identify and destroy PCB
- Successes and quantitative achievements with the launching of case studies
- Reinforcement Campaigns: Risks of not maintaining electrical equipment
 National backwash technology

Key Recommendation 6.

Certified Companies Costs of not adopting new technologies

Management Response:

As part of the restructuring of the project for its relaunch, one of the essential parts is considerate the development and implementation of a communication strategy for the project and the Integrated System of Management Services, which will be the NGO that will stay over time even when the project financing concludes. The System will be the focus point of contact for the all the involve players.

In this way the Strategy Communication that will publicize all the activities carried out by the System, as well as promote the different service companies that comply with the different legal guidelines in addition to being certified in good practices in the management and elimination of PCB, will announce the different services as the capacity building for workshops, the legal support for the elimination procedures and all the possible legal framework actualization.

Key Action(s)	Time Responsible		Tracking	
	Frame	Unit(s)	Status	Comments
1. Establishment of communication channels by type of stakeholder, adapting the message and the motivation. Plan with semiannual goals and harmonized to the expected achievements of the Project Closure Plan.	April 2023	PCU	Initiated	A process of promotion and communication with the different players has been sustained to promote the different activities and supports that the Integrated Management Services System offer. There are letters of intent from different actors to join the System which is in process of being legally registered. In addition to the different meetings made with the different player there has been made a distribution of the information brochure of the Integrated Management Services System. Management services to more than

Key Recommendation 6.							
2. The analysis of the SISG				500 companies that have been contacted for the sampling of their transformers, as well as by PROFEPA during their technical visits. The Integrated System			
 participation of the private sector) is central to its operation; it is essential to think of alternatives that not only reduce costs by reducing transportation costs by "pooling nearby pollutant loads". It is necessary to think of various alternatives that all aim to reduce costs and improve the willingness to participate in the program, therefore it is proposed to survey: Allocate funds that go directly to various subsidies from donors linked to sensitive sectors: For remote regions, ecologically sensitive regions, for small and medium-sized enterprises, for cooperative or social enterprises, for health or education enterprises, for indigenous peoples' enterprises, etc. Seek funds that can leverage resources: Guarantee funds for companies that want to carry out backwashing or destroy PCBs. It is important to show results soon, therefore, a descending subsidy scale is 	June 2023	PCU	Initiated	is in the process of be legally registered as an NGO with the legal structure to receive donations and with the faculty to develop activities that will be implemented to strengthen the PCB management and elimination process. The NGO operation has the objective of facilitate the role for the destruction of PCBs, search for financing, integration of workshops or companies that are dedicated to collection, environmentally adequate destruction of contaminants with cost- effective prices in the market, as well as the promotion of backwashing in equipment that requires it, among others.			

Key Recommendation 6.	
proposed, for example, companies that make the decision to send their treatment before July 1, 2022 will have a project	and the new elimination infrastructure could encourage price reductions due to the transportation costs of
January 1, 2023 15% and before July 1, 2023 10% or until the subsidy is	for this process.
exhausted. It is necessary to negotiate with other international cooperation	mention that only the highly sensitive areas are subjects to receive resources.
actors (IDB, World Bank, JICA, GIZ, etc.) and propose to them to support a financial mechanism for	
2023 during the first semester of 2022 so that it can be viable.	

Cross-cutting issues

Key Recommendation 7.

It will be essential that gender, human rights and inclusion issues are worked on with the support of the GAP document prepared by the project; the documents and consultancies generated by the project should include indicators for monitoring and compliance with the actions. In order to translate the actions in the field, the differentiated impacts on decision making should be identified, women have specific needs as stated in the GAP, in order to know the needs of women:

i. Collect and request sex-disaggregated data.

ii. Train and involve women at the local level in the activities that the project will develop at the state level, so that women's knowledge of the dynamics of their institution or community can be tapped.

iii. Identify and evaluate specific needs in situations of adequate PCB management, which define their participation and integration in specific actions.

iv. Ensure that women benefit from the training and that their role in the proper management of PCB is identified.

v. Allocate budget for the implementation of the Project's GAP.

Key Recommendation 7.

Management Response:

The project has its generated Action Plan that will be implemented through the consultancies that are underway.

Key Action(s)	Time Frame	Responsible Unit(s)	Tracking	
			Status	Comments
1. Coordinate actions between the Project's PCU and SEMARNAT's Coordinating Unit for Social Participation and Transparency, which is in charge of the Gender Equity Directorate and the Human Rights and Environment Directorate in coordination with UNDP's Gender Focal Point, in order to develop synergies to implement the GAP.	April 2023	PCU	Not Initiated	The PCU will coordinate with the corresponding entities to promote the project's gender action plan.