

Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility
(Version 5)

STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: November 03, 2017
Screener: Sunday Leonard
Panel member validation by: Ricardo Orlando Barra Rios
Consultant(s):

I. PIF Information *(Copied from the PIF)*

FULL-SIZED PROJECT	GEF TRUST FUND
GEF PROJECT ID:	9576
PROJECT DURATION:	5
COUNTRIES:	South Africa
PROJECT TITLE:	Environmentally Sound Management and Disposal of PolyChlorinated Biphenyls[PCBS] in the Republic of South Africa
GEF AGENCIES:	DBSA
OTHER EXECUTING PARTNERS:	Africa Institute
GEF FOCAL AREA:	Chemicals and Waste

II. STAP Advisory Response *(see table below for explanation)*

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):
Concur

III. Further guidance from STAP

1. The objective of this project is to reduce and eventually eliminate the use and releases of PCBs to the environment in South Africa. This will be achieved through the development and implementation of pilot projects on Environmentally Sound Management (ESM), and the disposal of PCB-contaminated equipment and PCB-containing oils and wastes in South Africa.
2. South Africa currently has several PCB containing oils and waste especially in electrical equipment that pose a significant risk to human health as well as the environment. While some efforts have been made to clean up some of these wastes, the country is still faced with challenges that make it difficult to meet international clean up objectives. This barrier includes the lack of technical capacity, poor level of awareness, inadequate national inventory, lack of systematic investment mechanisms to support PCB management, and inadequate and disparity in PCB administrative and governing mechanisms.
3. This project aims to overcome these barriers by capacity building and awareness raising initiatives, improvement of the current inventory, and eventual demonstration treatment and disposal of PCB wastes.
4. There is limited information in the baseline information on the tonnage of PCB oils and waste in South Africa. It only provides information on concentrations. This information needs to be provided even if preliminary.
5. Depending on the concentration, some PCB contaminated waste will be sent for incineration outside South Africa while others will be treated within the country. However, the specific technology to be deployed for the treatment within the country is not stated in the project proposal. This is a valuable information needed to verify the scientific and technical feasibility of the project and should be provided.

6. Furthermore, PCB incineration requires specific parameters for destruction efficiency (see, for example, Rahuman et al., 2000: https://clu-in.org/download/remed/destruct_tech.pdf; USEPA: <https://clu-in.org/download/contaminantfocus/pcb/PCB-EPA-600-S-13-079.pdf>). It is important that the incineration facilities that will be employed for this project meet these parameters, to prevent unintended consequences for human and environment health.

7. One of the identified challenges is the fact that municipalities across the country do not, for the most part, have specific schemes or administrative mechanisms governing PCB oils, which means some still procure PCB-contaminated transformers. It is not clear from whom these purchases are being made (within or outside the country). Capacity building and awareness raising is needed not only for municipalities but also for customs officials, especially if the purchase is from outside South Africa. Mechanisms (policies and regulations) need to be put in place to prevent sales of contaminated equipment within the country. This should be considered by the project.

8. The project intends to destroy 2500 tons of "PCB oils and contaminated equipment." This expected Global Environment Benefit is however not clear. Is the project intending to destroy 2500 tons of PCB contained in contaminated equipment or is the weight of the equipment included in the projected 2500 tons? It is essential to provide the tons of "PCB" expected to be destroyed. This is important to the GEF in accounting for Global Environment Benefits.

9. One of the identified challenges is the lack of systematic investment mechanisms to support environmentally sound management of PCB wastes in South Africa. However, no solution for this was provided in the project document. This is particularly important for the sustainability of the project. It would be useful if this project could help create a mechanism that provides investment for the disposal of the remaining PCBs and other hazardous chemicals in South Africa.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Concur	In cases where STAP is satisfied with the scientific and technical quality of the proposal, a simple "Concur" response will be provided; the STAP may flag specific issues that should be pursued rigorously as the proposal is developed into a full project document. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design prior to submission for CEO endorsement.
2. Minor issues to be considered during project design	<p>STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:</p> <p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised.</p> <p>(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>
3. Major issues to be considered during project design	<p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p> <p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required.</p> <p>The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP's concerns.</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>

