



**REPORT ON THE SADC/SAPP PCB PHASE OUT
WORKSHOP IN JOHANNESBURG, SOUTH AFRICA**

Date: 10 to 12 May, 2011

Venue: Indaba Hotel, Four Ways

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Acronyms.

BPC	Botswana Power Company
BSRC	Basel and Stockholm Convention Regional Centre
CEB	Power Utility of Mauritius
Eskom	Power Utility of SA
ESM	Environmentally Sound Management
GEF	Global Environmental Facility
LEC	Lesotho Electricity Company
NAMPOWER	Namibia Power
NIP	National Implementation Plans
PIF	Project Identification Forms
POPs	Persistent Organic Pollutants
RCBC	Regional centre for Basel Convention
SADC	Southern Africa Development Community
SAPP	Southern African Power Pool
SEC	Swaziland Electricity Company
SNEL	Power Utility of DRC
SSC	Secretariat of the Stockholm Convention on POPs
UNEP	United Nations Environment Programme

1. Background.

The Southern African Power Pool (SAPP) is collaborating with the United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (DTIE) to develop a full-sized project for submission to the Global Environmental Facility (GEF) to support SAPP members to phase-out PCB in the SADC as well as related capacity building and awareness. The UNEP Secretariat of the Stockholm Convention (SSC) received funding from the Government of Norway to promote transformer life-cycle management as a tool for preventing PCB contamination in Southern Africa. The UNEP/SSC and the SAPP agreed to co-operate to undertake a project in SAPP countries to provide good technical and economic arguments for proper transformer management, including the prevention of cross-contamination of PCB free equipment from residues of contaminated transformers during refill activities. The project will include capacity building and outreach components and an expert meeting was therefore convened to facilitate information exchange and brainstorming.

Under the MoU between the SAPP and UNEP/SSC it was agreed, among other activities, that SAPP shall organise and co-ordinate a technical meeting and brainstorming session bringing together experts and government stakeholders from SAPP member countries and UNEP/SSC to update various technical documents on transformer management, occupational health, inventories and interim storage of PCB containing oils.

The Workshop was convened in Johannesburg, South Africa from 10 to 12 May, 2011.

2. Workshop Objectives.

The objectives of the workshop were as follows;

- To provide SAPP representatives with PCB management training
- To develop work plan for the updating of the SAPP PCB management guidelines
- To identify specific needs of workers in SAPP and develop work plan for the preparation of training materials and organization of training courses
- To introduce the PEN on POPs Social and assist SAPP representatives to make use of it
- To inform participants about the GEF funded Regional Project on Environmentally Safe Management of PCBs in SADC countries
- Support the development of relevant documents to obtain GEF grant for a full sized project for the SADC region

2.1 Organisations Represented.

- 15 SAPP representatives
- 1 SADC utility representative (Mauritius)
- 5 Government representatives (Mozambique, Zambia, DRC, Lesotho, South Africa)
- 3 Basel Convention Regional Centre/Stockholm Convention Regional Centre representatives
- 2 international consultants recruited by UNEP

2.2 Country and Utility Representation

Country	Gov	Utility	Presentation
Angola	No	No	No
Botswana	No	Yes	Yes
DRC	Yes	Yes	Yes
Lesotho	Yes	Yes	Yes
Madagascar	No	No	No
Malawi	No	Yes	Yes
Mauritius	No	Yes	Yes
Mozambique	Yes	Yes	Yes
Namibia	No	Yes	Yes
S.A.	Yes	Yes	Yes
Swaziland	No	Yes	Yes
Tanzania	No	Yes	Yes
Zambia	Yes	Yes	Yes
Zimbabwe	No	No	No

DAY 1- 10 May, 2011

3. Welcome Remarks.

The SAPP Environmental Sub-Committee Chairperson, Mrs Matseliso Moremoholo welcomed all to the workshop and requested participants to introduce themselves. Apologies were received from the following;

- Government of Swaziland
- Government of Zimbabwe
- Zimbabwe Electricity Supply Authority (ZESA)
- UNEP

Absent without Apology;

- Government of Angola
- Government of Botswana
- Government Madagascar
- Government of Malawi
- Government of Namibia
- Government of Mauritius
- Government of Tanzania
- Electricity Utility of Angola (ENE)
- Electricity utility of Madagascar

4. **PRESENTATION 1: SAPP Overview by Johnson Maviya, Environmental Officer, Southern African Power Pool**

The first presentation was done by Johnson Maviya of the Southern African Power Pool (SAPP). The objective of the presentation was to introduce participants to the SAPP and to have a general overview of the Southern African Power Pool, which is the executing agency of the PCB Phase-out Project in the Southern African

Development Community (SADC) region. The presentation basically covered the following areas:

- The SAPP overview including history of the SAPP, membership, utility installed capacities, and generation mix
- The SAPP's safety, Health and Environmental Policy
- SAPP Environmental Management Guidelines including SAPP PCB Management Guidelines
- SAPP Position on Climate Change
- Renewable Energy initiatives in the SAPP
- Energy Efficient Practices in the SAPP
- Capacity building
- Challenges

See Appendix 1 for the SAPP Overview Presentation.

5. Presentation 2. Global POPs Convention: The PCBs Elimination Network (PEN) and Technical Assistance to the SAPP presented by Moore Moffat – Projects Co-ordinator, Basel Convention Regional Centre for English Speaking Countries in Africa and Stockholm Convention regional centres for capacity building and the transfer of technology

The presentation highlighted that the Africa Institute was established in 2009 and consists of 23 English speaking countries in Africa. Its mandate is to undertake the following:

- To develop capacity of members to manage Hazardous Waste(HW)
- To develop capacity of members to participate and influence international negotiations in HW and Chemicals Conventions
- To enhance regional research and monitoring of HW and Chemicals
- To facilitate access to the transfer of technology for sound management of HW
- To disseminate information on ESM of HW and Chemicals

PCB's Elimination Network

The presentation also introduced the PCB's Elimination Network which has a global membership of 900 PCB experts. It is a web-based tool that facilitates information exchange, discussions and enables members to identify other PCB experts. The worldwide network of experts on PCBs is open to all SAPP technical staff for information exchange. In addition, a closed group open only to SAPP members and the experts currently involved in this project, has been created.

The PEN has 4 Thematic Platforms;

1. Inventories of PCBs
2. Management of PCBs
3. Disposal of PCBs equipment
4. PCBs in open applications

PEN Magazine

The first edition of the PEN Magazine is focused on inventories of PCBs. The 120 pages compendium is available in all 6 official UN languages.

The PEN, the SAPP and GEF Project

The Secretariat of the Stockholm Convention will support the SAPP and its members during the formulation and implementation of the GEF project.

It was mentioned that the Stockholm Convention had brokered USD 70k financial support from Norway to promote transformer life-cycle management as a tool to promote better transformer management to prevent PCBs cross-contamination in the transformer populations of the SAPP utilities.

See Appendix 2. For the Detailed Presentation from the RCBC.

6. PRESENTATION 3: SADC PCB Phase-out Project by Robert CHOONG KWET YIVE, *Consultant of the SADC PCB Phase-out Project*

The presentation introduced the participants to the SADC PCB Phase-out Project. It was highlighted that for any country to participate, it has to have completed its NIP. The main objectives of the projects were outlined as follows:

- To demonstrate the advantages of a regional approach to Environmentally Sound Management (ESM)
- To strengthen capacity in the region for EMS
- To reduce the costs of disposal and decontamination

Project Components were identified as;

1. Capacity building at National/ regional level
2. Capacity building at utility level
3. ESM services available
4. Awareness of key stakeholders

Project out comes highlighted are;

- Regionally developed and harmonised national regulatory infrastructure
- Detailed inventories of equipment containing PCB
- An economically viable and socially acceptable regional mechanism for ESM of PCBs, from collection, storage, labelling, Transportation and disposal
- Raised awareness of the benefits of ESM of PCB containing equipment in Africa

The project would be implemented in two phases.

Phase 1. (2years)

This would involve regulation, capacity building, inventories, management systems, storage at national hubs

Phase 2 (3 years)

This would involve collection and transportation of equipment for disposal, disposal/destruction of target tonnages, awareness raising to informal sectors.

There are two key Partners.

1. The Southern African Power Pool (SAPP), which is the Executing Agency of the project
2. *The Basel Convention Regional Centre for English Speaking Countries in Africa and Stockholm Convention regional centres for capacity building and the transfer of technology*, at the Africa Institute, based in Pretoria (BSRC)- (Involvement in the project to be defined at a later stage)

**Active participation is expected by utilities in the respective SADC countries as most if not all of the PCB stocks are within their equipment.*

The Way Forward

- **The Project Identification Form (PIF)** is to be developed and submitted to GEF by July/August 2011
- If approved, then the Project Document would be developed for the CEO endorsement by June/July 2012
 - Look for secure and confirm all co-financing
 - Secure and confirm all partnerships

While all power utilities except Zimbabwe, Madagascar and Angola were represented, the main concern was the absence of the majority of government representatives. Out of 14 SADC countries, only five were represented namely: RSA, Lesotho, Mozambique, Zambia and DRC. It was pointed out that **ALL** governments were invited by the SAPP through their POPs Focal Points and efforts were further made to ensure that invitations were extended to them through the SAPP representatives in each country. As a way forward, participants assigned the SAPP and the Africa Institute to ensure that all SADC governments are taken aboard on this project.

See Appendix 3 for the full Presentation on the SADC PCB Phase-out Project.

7. Country/Utility Presentations on PCB Status

7.1 The session was chaired by Dr. Letsela, the Executive Director of the Africa Institute

The following countries/utilities represented made presentations on the status of PCB in their respective countries.

- Botswana
- Lesotho
- Mozambique
- Malawi
- DRC
- Namibia
- South Africa

- Tanzania
- Zambia
- Swaziland
- South Africa
- Eskom

See Appendix 4 for country/utility reports on the status of PCB Management in the SADC countries

DAY 2 – 11 May, 2011

8. PCB Management Training by Michael J. Muller, PCB Expert

The whole day was dedicated to PCB Management Training by Michael J. Muller a PCB Management Expert. The training was done in six presentations which are as follows;

1. Sources of and Hazards of PCBs
2. Transformers and Capacitors
3. Concerns with phasing out of PCB devices
4. Requirements around change of PCB equipment
5. PCB Disposal options
6. Maintenance and cross contamination

Appendix 4 to 10 contain presentations on PCB Management by Michael Muller

DAY 3 – 12 May, 2011

9. Work Plan

The Third Day of the Workshop was dedicated to planning on the Way Forward

The meeting reviewed the Workshop objectives to assess if the objectives had been accomplished:

Objective 1. To provide SAPP representatives with PCB Management training.

The participants agreed that this aspect had been adequately covered by a competent, experienced consultant on the subject. The presentations given would go a long way in designing Training Modules at utilities.

Objective 2. To develop a work plan for updating SAPP PCB Management Guidelines

The participants felt that the current SAPP PCB Management Guidelines are very adequate for the purposes of regional guidelines. What is left is to adapt the regional guidelines to specific situations pertaining to different countries. This being the case, the SAPP/SADC countries are required to adopt the SAPP PCB Guidelines and adapt them to their own situation and develop “National PCB Management Guidelines for use at utility/country Level”

Objective 3. Develop work plan for the preparation of Training Materials and organisation of Training Courses

This was done. A work plan for training at national and utility level was adopted.

Objective 4. To introduce the PEN on POPs Social and assist representatives to make use of it

This aspect was accomplished. Moore Moffat from Africa Institute was able to explain in detail the registration process to the POPs Social. This was consolidated by a “Skype” presentation/discussion done to the participants by Robert Bechtloff.

Objective 5. To inform participants about the GEF funded Regional Project on Environmentally Safe Management of PCBs in SADC countries / Support the development of relevant documents to obtain GEF grant for a full sized project for the SADC region

This was fully covered by Professor Robert CHOONG KWET YIVE in his presentation.

10. WAY FORWARD

As a follow-up to the workshop, participants developed a work plan on issues to be done within the next six months.

Activity Description	Responsibility	Delivery Date
<ul style="list-style-type: none"> National meeting to inform major stakeholders including officials from various government departments and other stakeholders(IPPs, ITCs), Mining, etc about the Regional PCB Project funded by GEF and also to provide feedback about the Johannesburg Workshop on PCB Management and training Production of a short report on the workshop to the SAPP CC for compilation as per the Donor's requirement. This should include photos as well 	<ul style="list-style-type: none"> Government/POP Focal point to convene the meeting Utility members to assist with presentations during the meeting Gov & Utility to produce a report to the SAPP CC on the meetings 	August-2011
<ul style="list-style-type: none"> Letter to governments introducing the regional PCB Phase-out project and lobbying all SADC governments to participate in the regional PCB Phase-out project. 	BSRC / SAPP / UNEP	15 June 2011
<ul style="list-style-type: none"> Consultants to develop training material for the utility level training / capacity building and awareness raising workshops 	Michael Muller for the SAPP under the SAPP/UNEP/SSC MoU	May/June 2011
<ul style="list-style-type: none"> Utility workshop – Utilities to run internal workshops on PCB Management 	Environmental Managers & POPs Focal points(those who received training in Johannesburg)	June to August, 2011
<ul style="list-style-type: none"> Consultants to produce a checklist including one page listing of possibilities and ways of co-financing and benefits 	Michael Muller & Nee Sun Choong Kwet	18-05-2011
<ul style="list-style-type: none"> Checklist of things required for PIF compilation 	Robert /Michael	18-05-2011
<ul style="list-style-type: none"> Endorsement Letters and completion of the Project identification Form (PIF) 	Utilities/Governments/ Robert Choong Kwet Yive/inputs from BSRC and UNEP/SSC	June 2011
<ul style="list-style-type: none"> Development of National PCB Management Guidelines 	Utilities/ Governments	August, 2011

11. Conclusion.

The Workshop ended at 13h00 on 12 May 2011. Members were in agreement that workshop objectives were met during the 3 days in Johannesburg. The Chair thanked everybody for their active participation and urged all to ensure that tasks allocated to them are accomplished by the indicated dates.

12. List of Participants.

No	Name	Organization	Position	e-mail	Country
1	Johnson Maviya	SAPP	Environmental Officer	maviya@sapp.co.zw	Zimbabwe
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15	Joseph Gungunhana	MICOA	Env Officer		Mozambique
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23	Chrispin Simwanza	ECZ	Snr Inspector	csimwanza@yahoo.com	Zambia
24	Sanjay Sookhraz	C.E.B	Env Affairs Officer	Sanjay.sookhraz@ceb.intnet.mu	Mauritius
25	Matseliso Moremoholo	LEC	Env Officer	Moremoholo@lec.co.ls	Lesotho
26	Michael Muller	PCB Expert	Consultant	Michael.mueller@enviro-consultant.com	Germany
27	Robert Choong Kwet Yive	Consultant	Consultant	Robert@uom.ac.mu	Mauritius
28	Taelo Letsela	Africa Institute	Executive Director	tletsela@environment.gov.za	RSA
29	Moore Moffat	Africa Institute	Project Co-ordinator	mmoffat@environment.gov.za	RSA