United Nations Industrial Development Organization

Activities for Full-Sized Project to Implement an Environmentally Sound Management and Final Disposal of PCBs in the Republic of Serbia

UNIDO ID: 100313; GEF ID: 4877

Workshop for potential technology providers and technical vendor meeting

12th April 2019

AIDE MEMOIRE

1. Background information and Objective:

The Republic of Serbia ratified the Stockholm Convention on POPs and has also adopted the National Implementation Plan for the Stockholm Convention.

The overall objective of this Project is to protect human health and the environment by reducing and eliminating the releases of and exposure to PCBs through establishment of an environmentally sound PCB management system and final disposal of 200 tons of PCB equipment. The power sector and other PCB equipment owners will be able to better manage their PCB contaminated equipment and implement the PCB disposal plan under which all PCB contaminated equipment shall be disposed of by 2028 at latest to meet the Stockholm Convention's mandate. This project will contribute to strengthening the national capacity for the environmentally sound management of PCBs and setting up the in-country final disposal option for PCB contaminated equipment with low PCB concentrations.

The key partners identified during the project preparation phase were Electric Power Company of Serbia (EPS - in Serbian) and Serbian Railway Company. The initial inventories revealed the current PCB profile of the country. The project will further expand the inventory before finalizing

the technical specification of the final disposal options suitable for the country's PCB profile.

This project will focus on the attainment of the following outcomes:

- Strengthening of the national coordination mechanism by building on the existing national coordination mechanism in place for the sound management of waste and chemicals;
- Establishing legal, regulatory, and policy framework on sound management of PCBs (Outcome 1);
- Building institutional capacities and awareness on the sound management of PCBs (Outcome 2);
- Conducting the detailed inventory of PCBs containing equipment and waste (Outcome 3)
- Establishing the in-country final disposal technical option for low PCB contaminated equipment, oil, and waste (Outcome 4) and
- Integrating the public-private partnership into the national assessment scheme for PCB contaminated sites (Outcome 5).

The activities listed in the project document will be executed by the national Project Management Unit (PMU) managed by the Project Coordinator.

Country situation regarding PCB contaminated transformers – Serbia

The initial inventories revealed the current PCB profile of the country. The current project further expanded the inventory before finalizing the technical specification of the final disposal options suitable for the country's PCB profile.

- Pure PCB and high POPs equipment, transformers and capacitors, have been exported for final disposal in the quantity of approx. 1.500 tons
- Remaining quantities of pure PCB and high POPs equipment are estimated at 200 – 300 tons
- Low POPs (below 3.000 ppm PCB) transformers at high voltage grid (at and above 35 kV) decontaminated in the extent of around 95%
- Low POPs (below 3.000 ppm PCB) transformers at low voltage grid (at 20/0.4 and 10/0.4 kV) decontaminated in the extent of around 10% and foreseen for decontamination
- 90% of low POPs transformers are estimated to contain up to 500 ppm PCB
- Estimated number of low POPs units at low voltage is 3900 (reliability margin +/- 30%)
- End of life units should be decontaminated below 50 ppm or 10 ppm PCB in order to facilitate recycling of metals

Technical workshop will be organized for any interested potential technology providers to present their products and services to the wide range of stakeholders and share information concerning recent development of the alternative disposal/destruction technologies for management and disposal of PCBs. Following Technical workshop UNIDO procurement division will publish call to bidders for decontamination/final disposal of tentative quantities of 200 tons of PCB declared (high POPs) or PCB contaminated (low POPs) equipment.

PCB management plan developed for Serbia, relevant legal framework and regulations, and PCB inventory results will be presented at the Workshop by National Project Office. Potential technology providers are encouraged to take part and present their technology solutions.

For this event it is expected to cover the following outcomes:

Expected outcomes of the workshop:

Workshop for potential technology providers with technical vendor meeting will be organized for any interested potential technology providers to present their products and services to the wide range of stakeholders and share information concerning recent development of the alternative disposal/destruction technologies for management and disposal of PCBs.

This event will be held before the request for proposal will be advertised. This could be an opportunity for the vendors to be acquainted with the real needs and priorities of the country, based on the options described above, in order to be able to submit the tender document fine-tuned to be applicable and technically and financially acceptable.

Based on this workshop, Management plan for PCBs contaminated equipment and Techno Economic Analysis of different scenarios for the elimination of PCBs in the Republic of Serbia, the national operating entity will be selected, in consultation with the MoEP taking into consideration:

- the experience in handling toxic wastes;
- availability of investment capital;
- logistical capacities in term of equipment and trained and experienced staff;
- provision of comprehensive services including packaging, transport and disposal of hazardous wastes and
- clean track record and free from penalties resulting from regulation violations.

In this case, the project will purchase the technology and deliver to the operating entity. In case the feasibility study demonstrates that there is no justification for purchasing of the technology, then the technology provider will be requested to perform the entire scope of services related to the decontamination the foreseen quantities of 200 tons of PCB containing transformers.

2. Date and venue:

The Workshop will be held on 12th April 2019 in the Ceremonial hall at the Faculty of Technology and Metallurgy University of Belgrade, Belgrade, Karnegijeva 4, third floor.

3. Tentative Agenda

09.30 - 10.00	Registracija učesnika i kafa Participant registration and coffee	
Vreme/Time	**Predavanje/Presentation**	**Predavač/Lecturer**
10.00 - 10.05	**Pozdravna reč** **Welcome introduction**	**Aleksandar Orlović**, Nacionalni rukovodilac projekta/ National project manager
10.05 - 10.30	**Prezentacija plana za upravljanje PCB-om kontaminiranih uređaja u Republici Srbiji** • **Plan upravljanja** • **relevantni zakoni i pravilnici** • **rezultati inventara PCB kontaminiranih uređaja** **Presentation of PCB management plan for electrical equipment in Republic of Serbia** • **management plan** • **all relevant legal framework and regulations** • **PCB inventory results**	**Aleksandar Orlović**, Nacionalni rukovodilac projekta/ National project manager **Aleksandar Jovović,** Konsultant na projektu/ Project national consultant **Milan Anđelić,** Konsultant na projektu/ Project national consultant
10.30 - 13.30	**Tentative presentations by Technology vendors:** 1. **Sea- Marconi** 2. **Institute Nikola Tesla** 3. **Rade Koncar Skoplje** 4. **SetCar Braila** 5. **Holcim LaFarge Beocin** 6. **Valorec Services AG, Regionale Sondermuellverbrennungsanlage (RSMVA)** 7. **Tredi** 8. **Senexen** 9. **Enervac**	**To be confirmed** **Presentation should last 20 min**
13.30 - 14.30	**Okrugli sto - diskusija o prikazanim tehnologijama i konačnom zbrinjavanju PCB kontaminiranih uređaja u RS** **Round table discussions – applicability of presented technical solutions within the framework of Management plan for PCB contaminated equipment in the RS**	**Moderators** **Aleksandar Orlović**, Nacionalni rukovodilac projekta/ National project manager **Milan Anđelić,** Konsultant na projektu/ Project national consultant **Aleksandar Mickovski** Međunarodni ekspert/ International expert **Olivera Kuzmanović**, Nacionalni tehnički ekspert/ National technical expert
14.30 - 14.45	**Završna reč** **Concluding remarks**	**Aleksandar Orlović**, Nacionalni rukovodilac projekta/ National project manager
14.45 - 16.30	**Ručak** **Lunch break**	

4. Participants

The Workshop will be attended by representatives from the government bodies and agencies, government stakeholders, MoEP/SEPA, MoEaM, NGOs and members of the Project Team.
Tentative list of technology providers and operators:

Technology vendors:

1. Sea- Marconi
2. Institute Nikola Tesla
3. Rade Koncar Skoplje
4. SetCar Braila
5. Holcim LaFarge Beocin
6. Valorec Services AG, Regionale Sondermuellverbrennungsanlage (RSMVA)
7. Tredi
8. Senexen
9. Enervac

National operators registered under codes: 13 03 01, 16 02 09, 16 02 10:

1. DRA GROUP
2. ECOLOGY ACTION
3. EKO METAL
4. JAKOB BECKER
5. JUGO-IMPEX
6. KEMIS
7. MITECO
8. SET RECIKLAŽA
9. ECOLOGY PARTNERS
10. E-RECIKLAŽA NS
11. INOS NAPREDAK DOO MISAR

5. Language requirements

The official working language of the Workshop will be the English.

6. Financial and administrative arrangements for the meeting

Financial and administrative arrangements for the participants who are invited and who accepted the invitation will be made in accordance with UNIDO's rules and regulations.

<u>UNIDO will provide the following</u>:

- Costs of catering, coffee and refreshments
- Conference facilities, printing/photocopying for materials needed for the Workshop

<u>Neither UNIDO nor the Host institution will assume responsibility for the following expenditures:</u>

a. Cost incurred by the participants with respect to any insurance, medical bills and

hospitalization fees.

b. Compensation in the event of death, disability or illness.
c. Loss or damage of personal property of participants
d. Travel costs and daily substance allowance

8. Visa/Passport

Before leaving the home country, international participants should complete all formalities regarding entry and transit visas, which they may require for the journey to the Republic of Serbia. International participants are advised to check at the following web page of the Ministry of Foreign affairs of the Republic of Serbia about the visa regime: http://www.mfa.gov.rs/en/consular-affairs/entry-serbia/entering-serbia-requirements .

Before leaving the home country, international participants are urged to contact the nearest diplomatic or consular office of the Republic of Serbia to obtain visa and information on customs regulations.

9. Travel arrangements

Each participant and/or international participant is kindly requested to arrange travel on their own.

10. Hotel accommodation

Hotel reservations for the participants will be arranged individually. Hotel accommodation will not be covered by the Project.

11. Enquiries and correspondence:

All enquiries and correspondence on technical matters prior to the Workshop should be addressed to:

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