



Organizations Owning Pure Polychlorinated Biphenyls (PCBs) or PCB Contaminated Equipment (Transformers etc.): Attention Please!!! Reduction & Elimination of PCBs: Prioritizing the Power Sector in India”

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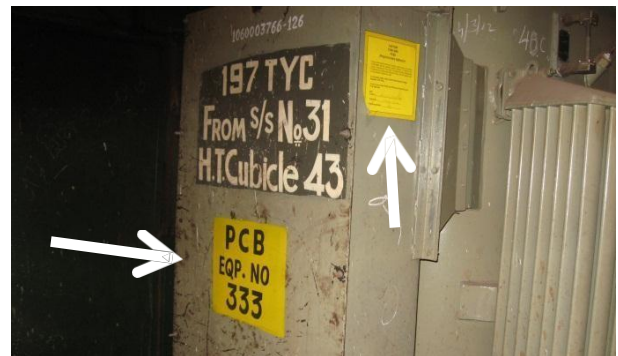
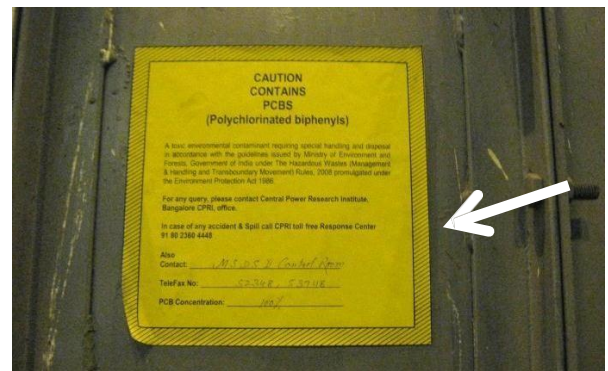
: Ministry of Environment, Forest & Climate change (MoEFCC), United Nations Industrial Development Organization (UNIDO) & Global Environment Facility (GEF) **Project**

Implemented By:

Central Power Research Institute (CPRI)

You are already aware that **Polychlorinated Biphenyls (PCBs)** are hazardous oil and may be found in electrical equipment manufactured before 1982. Oil analysis on samples removed from your organization has recently been performed by Central Power Research Institute (CPRI). The results confirm that your organization is an owner of either Pure PCBs or PCBs contaminated oil. PCBs are either present inside equipment (such as a transformer) or stored in drums/storage containers after removal from the equipment. As a responsible employee of the organization and a responsible citizen, there are a few actions you must perform to preserve the environment and not to allow any harm caused by mishandling or lack of proper information. The following FAQ addresses a few related issues.

If you suspect and you know that equipment contains PCBs, and do not see any sticker on them, inform your supervisor about the missing sticker and label.



1. What is the definition of a PCB Equipment?

- **Non-PCBs transformer:** any transformer containing less than 2 ppm (parts per million) PCBs.
- **Toxic PCBs-contaminated electrical equipment:** any electrical equipment, including transformers that contain between 2 and 50 ppm PCBs.
- **Highly toxic PCBs-contaminated electrical equipment:** any electrical equipment (transformers etc.) that contain PCBs between 50 & 500 ppm.
- **Hazardous PCB Transformer:** any transformer that contains 500 ppm or greater PCBs (pure PCBs).
- **PCB Equipment:** any manufactured article that contains PCBs, such as fluorescent light ballasts.

2. How do I know which equipment or other storage containers such as drums in my organization contains PCBs?

Look out for yellow colored large stickers or look for the identification painted on them.

3. What if my organization has not put the stickers or labels on the equipment or in storage area?

Remember, it is the collective duty of the entire staff of the organization to protect the environment from the hazards of PCBs.

4. What are the do's for such an equipment or storage area?

- The entry for the PCB contaminated equipment or storage must be restricted and should be notified.
- Leakages if any, around the equipment or storage containers need to be attended to. Provision to be made to collect the leakages in separate containers.
- Handling should be made by using gloves and spillages should be avoided. Any spillage should be collected by cotton waste and the same may please be stored safely for further treatment.

- If any oil leak is found near the area, wipe with waste cloth (only with gloved hands), followed by wiping the area clean with little kerosene or petrol. Collect all the cleaning waste separately, including the gloves (either in a plastic bag, tie and keep aside, or in a plastic drum with lid), specially maintained for collecting PCBs waste, safely and hand over to CPRI for disposal in a safe and environmentally friendly manner.
- Store all PCBs containing equipment in dry, enclosed shed from where there is no chance for the oil to leak and get mixed with soil, water or ground.



- Please remember that the PCBs are not harmful if they are kept closed in any form of containment such as a transformer or drums closed tightly. They are hazardous only when they get mixed with water (washing hands in sink after touching oil), or soil (throwing waste after cleaning PCBs in open soil or public disposal area) etc. A healthy PCB filled in-service transformer poses no threat to the personnel working in the area.
- Postpone activities such as refurbishment, refilling, filtering, draining and replacement of PCB contaminated or pure PCB filled equipment. In case of any exigency, due consultation can be taken by CPRI.
- CPRI with support from MoEFCC and UNIDO is making all efforts to clean the contaminated oil (make it PCBs free) or dispose it in an environmental friendly manner. This activity is planned to start by end of December 2015.

5. What are the don'ts for such an equipment or storage area?

- Do not allow any oil to spill or leak. If leaked by chance, do not handle oil in without protective gear (rubber gloves, safety goggles) etc.
- Do not throw any oil or any part of equipment that has come in contact with PCBs. You are not going to be held responsible for owning PCB filled equipment. It is well-known that all over the world PCBs were used in equipment for their useful properties and not with any wrongful intentions. It is only much later that the world came to know PCBs are harmful and so all are coming together to dispose PCBs in an environmentally friendly manner.
- Do not de-commission or completely dispose any transformer that may be healthy in all other aspects due to presence of mild PCB contamination in it. Even equipment filled with PCB contaminated oil can be reused after filling with PCBs free oil.

6. What are the action plans being taken by CPRI, MoEFCC and UNIDO regarding the de-contamination and disposal of PCBs contaminated oil and pure PCBs?

- Central Power Research Institute (CPRI), a Govt. of India organization under the Ministry of Power (MOP) is identified by UNIDO (United Nations Industrial development Organization) and MoEF (Ministry of Environment and Forests (Govt. of India) as a Nodal Agency to take measures in identification of PCBs in India and to dispose them in environmentally safe manner (ESM).
- A detailed road map is being made by CPRI to take up the decontamination activity through-out the country. Mobile PCB decontamination facility will be taking up the decontamination work to all the organizations identified in the road map.
- Transformers with mild contamination would be put back in service by replacing with new mineral oil. These can be further monitored for any PCB generated by the insulation and then taken up for decontamination.
- Till December 2015 or till receipt of intimation from CPRI, all activities connected with PCBs contaminated equipment must be postponed, unless absolutely essential. In that case, please contact CPRI for further instructions. Developments and any changes in the proposed activity will be made available in CPRI website.
- We appreciate the efforts of every professional in this national cause of protecting environment.

For Any information on PCBs, Please contact PCB Cell at CPRI.

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