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# Decontamination of PCB Contaminated Electrical Equipment Using INT Process for Simultaneous Dechlorination, Desulphurization and Regeneration of Mineral Insulating Oils

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# PCB's in Electrical Equipment

Stockholm Convention

PCB limited to 50 mg/kg in electrical equipment in service

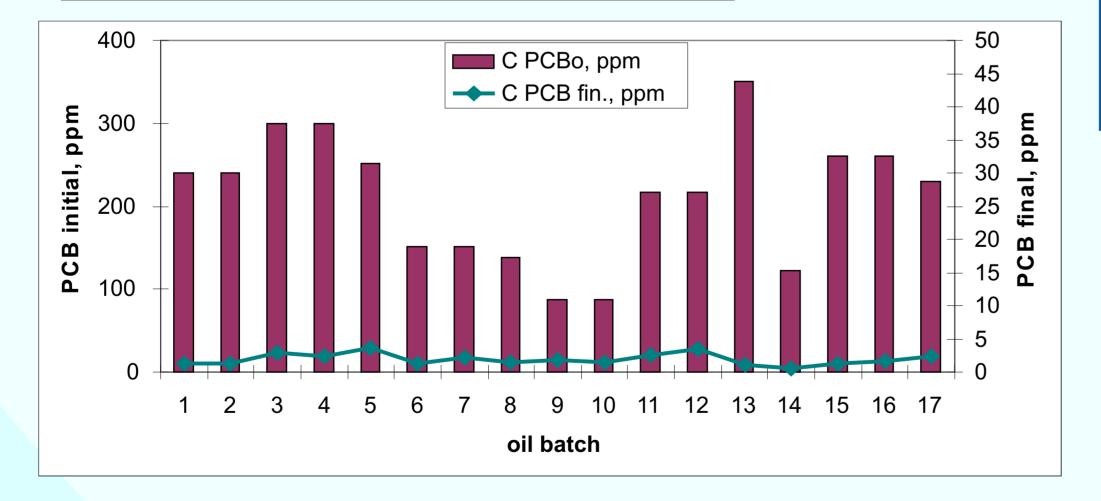
New equipment and oils PCB free

Sources of PCB Contamination

- Oil treatments (oil tanks, machines for oil treatment)
- Oil change and topping up (oil tanks, machines for oil treatment)
- Repair of transformers (TR workshops and factories, oil tanks)



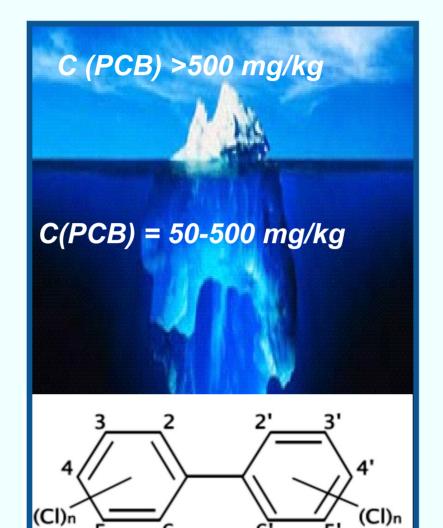
## **PCB Conversion**



#### CONCLUSION

- INT process is efficient in the removal of PCB, corrosive sulphur and ageing products from mineral insulating oils
- After treatment Oils and transformers have "extended life" and improved properties for further use
- INT process can be used for treatment of mineral oils and equipment after "end of life" (waste treatment)

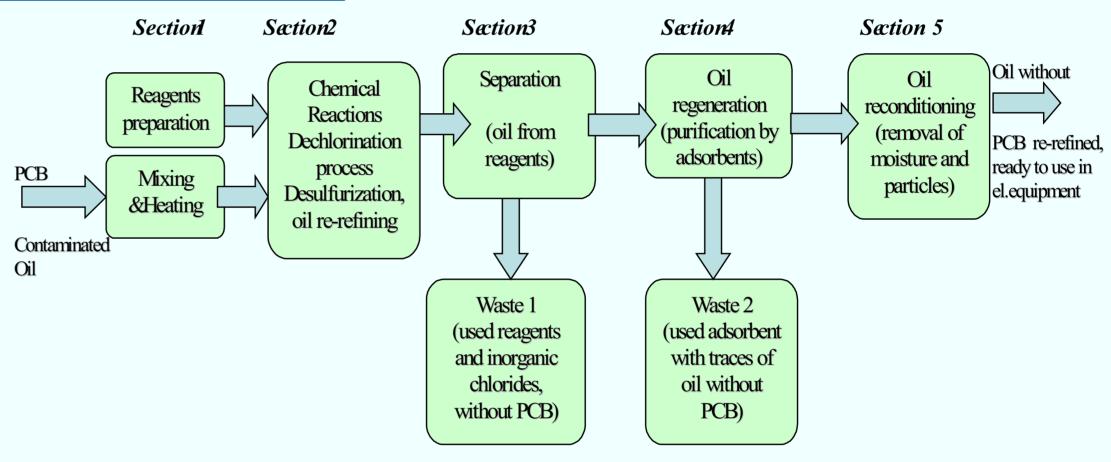
Implementation period: 2015-2018
Location: Republic of Serbia, Power Sector
Task: Eliminate PCB's in RS acc. to NIP



INT patented technology (RS 53510) for Simultaneous Oil Dechlorination, Desulphurization and Regeneration of Mineral Insulating Oils

- Removal of PCB, Corrosive Sulphur and Oil ageing products
- Improved Oil properties after treatment

# **Process flow**



# On Site Laboratory PCB BDV DDF IFT Below 50 ppm So ppm So

### **Results of PCB Decontamination**

