

RECOMMENDED INSTRUCTIONS FOR HANDLING P.C.B.'s IN THE ELECTRICAL INDUSTRY

NOTE: P.C.B. stands for Polychlorinated biphenyl and is a fluid which comes under various trade names, the most common in Australia being:-

AROCLOR
PYROCLOR
PYRALENE
CLOPHEN

P.C.B. fluids which are used in some electrical transformers and capacitors come in 44 gallon (600lb or 272kg) drums and in the case of Pyroclor and Aroclor have a "Harmful Substances" sign ~~X~~ prominently displayed on each drum, together with "Caution" notices and instructions (in four languages) on handling, use and disposal.

1. PERSONAL SAFETY

P.C.B.'s for use in transformers and capacitors have been made, handled, and used for over 40 years with the very limited hazard to personal health being confined to occasional cases of temporary skin lesions or irritations.

However, abusive use of P.C.B.'s may have longer term, more serious health problems and therefore every care should be taken not to allow P.C.B. fluid or fumes to enter the body e.g. through pores of skin, swallowing, inhalation or in the eyes.

2. PERSONAL PRECAUTIONS.

a. Skin Protect the skin by wearing neoprene coated aprons and P.V.C. impregnated cotton gloves. Barrier creams are of some value where the use of gloves is impractical.

If P.C.B. does come into contact with the skin then wash the affected area with soap and warm water.

b. Eyes Safety spectacles must be worn at all times when handling P.C.B.'s. Should P.C.B. enter the eyes then immediately wash the eyes well by flushing with large quantities of clean running water.

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c. Breathing At room temperature P.C.B.'s give off negligible fumes and are therefore harmless to breathing. However, at elevated temperatures via hot ovens, welding etc. where vapours are apparent, inhalation of these vapours must be strictly avoided by using proper exhaust ventilation and organic cartridge respirator (in confined areas) or air blowing apparatus (in more open areas) away from operators.

SMOKING MUST BE STRICTLY FORBIDDEN

d. Swallowing If P.C.B. is swallowed then vomiting should be induced immediately by carefully inserting a finger in the person's throat. Do not give stimulants. A doctor must be consulted as soon as possible.

e. Contaminated Clothing Badly P.C.B. soaked clothing should be disposed of, as in 4. below.

Partially P.C.B. splashed clothing should be laundered before wearing again to avoid possible skin irritation.

3. TRANSFER OF P.C.B.'s

When pumping P.C.B.'s from drums into factory storage tanks, ensure that no spillage occurs and that drums are completely drained and flushed twice with kerosene type solvent (*Refer 4 below) prior to scrapping. P.C.B. containers must not be re-used for purposes other than storage of P.C.B.'s

4. WASTE DISPOSAL OF P.C.B.'s

If P.C.B. spillage does occur then quick remedial action must be taken to ENSURE THAT THE FLUID DOES NOT ENTER THE ENVIRONMENT especially drains, canals, and other waterways. Suitable oil soakage material such as 'oilzorb', sawdust, rags, etc. should be used to quickly absorb the P.C.B. The contaminated materials must then be placed into sealable and prominently marked "P.C.B. CONTAMINATED WASTE" (Refer attachment 1.) 44 gallon drums for disposal of contents in 1100°C furnace or by the Metropolitan Waste Disposal Authority.

Excess or unusable P.C.B. and kerosene*flushed P.C.B. are to be stored in sealed and prominently marked "WASTE FLUID" (Refer to attachment 2.) 44 gallon drums or other suitable sealed container prior to disposal by incineration in 1100°C furnace or by the Metropolitan Waste Disposal Authority.

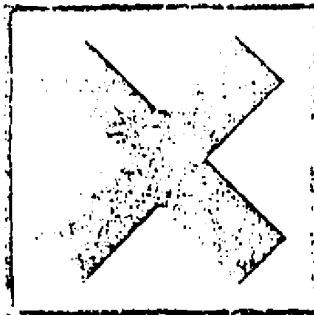
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5. DISPOSAL OF P.C.B. FILLED ELECTRICAL EQUIPMENT

P.C.B. filled transformers and capacitors which are to be scrapped must first be completely drained of the fluid (precautions and fluid disposal as above).

If high value material such as copper is to be reclaimed then this should be removed and washed in kerosene (*Refer 4 above) prior to re-use. All unwanted solid materials must be sealed up inside the transformer or capacitor tank or in 44 gallon drums for disposal in controlled dry land-fill areas. The tanks or drums should be prominently marked "SCRAP P.C.B. SOLID WASTE FOR CONTROLLED DRY LAND-FILL BURIAL" (Refer attachment 3.)

ATTACHMENT 1



CAUTION!

CONTAINS

CHLORINATED HYDROCARBONS

OR

P.C.B.

(POLYCHLORINATED BIPHENYL)

.....
WASTE DISPOSAL

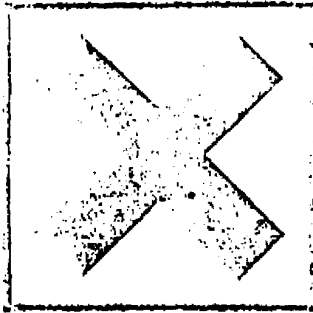
P.C.B. CONTAMINATED WASTE.

FOR DISPOSAL IN 1100°C FURNACE,

Or By

METROPOLITAN WASTE DISPOSAL AUTHORITY

MUST NOT BE TREATED AS NORMAL WASTE



CAUTION!

CONTAINS

CHLORINATED HYDROCARBONS

OR

P. C. B.

(POLYCHLORINATED BIPHENYL)

.....
WASTE DISPOSAL

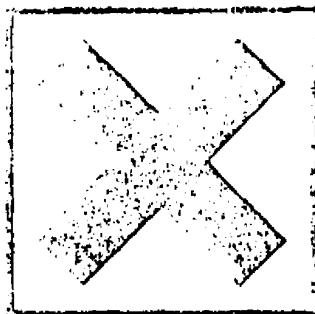
P.C.B. WASTE FLUID.

FOR DISPOSAL IN 1100°C FURNACE,

Or By

METROPOLITAN WASTE DISPOSAL AUTHORITY.

MUST NOT BE TREATED AS NORMAL WASTE !



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CONTAINS

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OR

P. C. B.

(POLYCHLORINATED BIPHENYL)

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WASTE DISPOSAL

SCRAP P.C.B. SOLID WASTE.

FOR CONTROLLED

DRY LAND-FILL BURIAL.

MUST NOT BE TREATED AS NORMAL SCRAP!

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