

**LIST OF TOXIC INDUSTRIAL WASTES****Acids**

1. Spent inorganic acids, e.g. hydrochloric acid, sulphuric acid, nitric acid, phosphoric acid, hydrofluoric acid, boric acid and pickling acid
2. Spent organic acids, e.g. acetic acid, formic acid, benzoic acid and sulphonic acid

**Alkalis**

1. Spent alkaline solutions
2. Spent ammoniacal solutions
3. Metal hydroxide sludges and oxide sludges

**Antimony and its Compounds**

Spent antimony potassium tartrate

**Arsenic and its Compounds**

1. Timber preservative residues containing arsenic
2. Wastes containing gallium arsenide

**Asbestos**

1. Asbestos wastes from asbestos/cement manufacturing processes
2. Empty sacks/bags which have contained loose asbestos fibre

**Cadmium and its Compounds**

1. Plating effluents and residues containing cadmium
2. Wastes containing cadmium from Ni/Cd battery manufacturing

**Chromium Compounds**

1. Plating effluents and residues containing chromium
2. Timber preservative residues containing chromium
3. Spent and aqueous solutions containing chromic compounds
4. Tannery effluents and residues containing chromium

**Copper Compounds**

1. Plating effluents and residues containing copper
2. Spent etching solutions containing copper from printed circuit board manufacturing
3. Timber preservative residues containing copper

## **Cyanides**

1. Plating effluents and residues containing cyanides
2. Heat treatment residues containing cyanides
3. Spent quenching oils containing cyanides
4. Spent processing solutions containing cyanides from photographic processing

## **Fluoride Compounds**

1. Timber preservative residues containing fluorides
2. Spent ammonium bi-fluoride

## **Isocyanates**

Spent di-isocyanates, e.g. toluene di-isocyanate (TDI) and methylene di-isocyanate (MDI) from polyurethane foam-making process

## **Laboratory Wastes**

1. Obsolete laboratory chemicals
2. Toxic chemical wastes from chemical analysis

## **Lead Compounds**

1. Sludges containing lead oxide/sulphate
2. Spent organo-lead compounds, e.g. tetraethyllead (TEL) and tetramethyllead (TML)
3. Waste lead-acid batteries, whole or crushed

## **Mercury and its Compounds**

1. Effluents, residues or sludges containing mercury from chlor-alkali industry
2. Wastes containing mercury from equipment manufacturing involving the use of metal mercury
3. Spent catalysts from chemical processes containing mercury
4. Spent organo-mercury compounds

## **Metal Catalysts**

Spent metal catalysts from chemical processes and petroleum refining, e.g. catalysts containing chromium and cobalt

## **Nickel Compounds**

Plating effluents and residues containing nickel

### **Organic Compounds containing Halogen**

1. Spent halogenated organic solvents, e.g. trichloroethylene, 111-trichloroethane, perchloroethylene, methylene chloride, tetra-chloromethane and 112-trichloro-122-trifluoroethane
2. Residues from recovery of halogenated organic solvents
3. Packaging materials or residues containing chlorobenzenes and/or chlorophenals and their salts

### **Organic Compounds not containing Halogen**

1. Spent non-halogenated organic solvents, e.g. benzene, toluene, xylene, turpentine, petroleum, thinner, kerosene, methanol, ethanol, isobutanol, isopropanol, methyl ethyl ketone, methyl isobutyl ketone, isopropyl ether, diethyl ether, hexane, dimethyl sulphide and dimethyl sulfoxide
2. Residue from recovery of non-halogenated organic solvents

### **Other Wastes**

1. Obsolete/abandoned chemicals and pesticides from storage, manufacturing and trading activities
2. Used containers, bags and process equipment contaminated by chemicals and pesticides from storage, manufacturing and trading activities
3. Wastes/residues containing unreacted monomers, e.g. vinyl chloride and styrene monomers, from polymer manufacturing processes
4. Tar residues from distilling and tarry materials from refining
5. Wastes from toxic waste treatment processes, e.g. wastes and residues from solidification, fixation and incineration processes
6. Wastes from toxic chemical drums and tank cleaning activities
7. Chemical and oil slops from ship tankers
8. Waste from the production, formulation and use of resins, latex, plasticisers, glues/adhesives containing solvents and other contaminants
9. Wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish containing organic solvents, heavy metals or biocides

### **Pathogenic Wastes**

Pathogenic wastes from hospitals

### **Phenolic Compounds**

1. Sludges/residues from paint stripping using chemicals containing phenols
2. Residues containing unreacted phenol and formaldehyde from adhesive industry

### **Polychlorinated Bi-phenyl (PCB) Including Poly-chlorinated Ter-phenyl (PCT)**

1. Spent transformer oil containing PCB and/or PCT
2. Retrofilled transformer contaminated with PCB and/or PCT
3. Electrical equipment and parts containing or contaminated with PCB and/or PCT, e.g. capacitors and transformers
4. Containers and all waste materials contaminated with PCB and/or PCT

### **Polyvinyl Chloride (PVC)**

All waste materials containing PVC, e.g. PVC insulated wires, PVC pipes and trunking, PVC parts, PVC upholstery and PVC resins

### **Silver Compounds**

Spent processing solutions containing silver from photographic processing

### **Used, Contaminated Oil**

1. Used mineral, lubricating and hydraulic oil from machine cylinders, turbines, switch gears and transformers
2. Spent motor oils from petrol and diesel engines
3. Spent quenching oil from metal hardening
4. Oil recovered from solvent degreasers
5. Spent oil water emulsions, e.g. spent coolants from metal working industries
6. Oil water mixtures (mainly oil), e.g. oily ballast water from ship tankers
7. Oil and sludge from oil interceptors
8. Tanker sludges and oil sludges/residues from storage tanks
9. Oil sludges containing acid from recovery and recycling of used oil

### **Zinc Compounds**

Plating effluents and residues containing zinc