

APPENDIX
Table 1
List of Hazardous Waste from Non-Specific Sources

Waste Code	Pollutant
	Halogenated Solvents
D1001a	Tetrachloroethylene
D1002a	Trichloroethylene
D1003a	Methylene Chloride
D1004a	1,1,2-trichloro-1,2,2-trifluoroethane
D1005a	Trichlorofluoromethane
D1006a	Ortho-dichlorobenzene
D1007a	Chlorobenzene
D1008a	Trichloroethane
D1009a	Chlorinated fluorocarbon
D1010a	Carbon tetrachloride
	Non-Halogenated Solvents
D1001b	Dimethylbenzene
D1002b	Acetone
D1003b	Ethyl acetate
D1004b	Ethyl benzene
D1005b	Methyl isobutyl ketone
D1006b	n-Butyl alcohol
D1007b	Cyclohexanone
D1008b	Methanol
D1009b	Toluene
D1010b	Methyl ethyl ketone
D10011b	Carbon disulfide
D10012b	Isobutanol
D10013b	Pyridine
D10014b	Benzene
D10015b	2-Ethoxyethanol
D10016b	2-Nitropropane
D10017b	Cresylic acid
D10018b	Nitrobenzene
	Acid/Bases
D1001c	Amonium hydroxide
D1002c	Hydrobromic acid
D1003c	Hydrochloric acid
D1004c	Hydrofluoric acid
D1005c	Nitric acid
D1006c	Phosphoric acid
D1007c	Potassium hydroxide
D1008c	Sodium hydroxide

D1009c	Sulfuric acid p73
D10010c	Chloric acid
	Other Non-Specific Sources Wastes
D1001d	PCB's (Polychlorinated biphenyls) including transformers and capacitors
D1002d	Lead scrap
D1003d	Waste industrial diesel oil
D1004d	Asbestos

**Table 2
Hazardous Waste from Specific Sources**

Waste Code	Type of Industri/Actifity	Explanation of Waste
D201	Fertilizer	-Catalysts
D202	Pesticide	-Effluent treatment sludge
		-Container and equipment used in formulation
		-Off-specification products
D203	Choloro alkaline process	-Effluent treatment sludge(containing mercury)
		-Salt purification
D204	Adhesived resin (UF, PF, MF, others)	-Off specification product
		-Catalysts
D205	Polymer industry (PVC, PVA, others)	-Non reactive monomers
		-Catalyst
D206	Petrochemical	-Sludge
		-Catalyst
		-Tar
D207	Wood preservatives	-Sludge
D208	Smelting/processing iron and steel	-Furnace ash
D209	Stell refining opertion	-Acid waste
		-Basic waste
		-Cyanide waste
		-Containing heavy metal
D210	Scrap lead smeltingh	-Sluges
		-Dust
		-Slags
D211	Cooper industry smelting and refining, electric furnace	-Dust from furnace, sludge, used solvent
D212	Ink	-Sludge -Used solvent
D213	Textile -Finishing -Dyeing	-Effluent treatment sludge containing metal

D214	Vehicle assembly	-Sludge
		-Organic and inorganic solvent
		-Process residues
D215	Electrogalvanizing and electroplating	-Sludge
		-Residue of electrolytic solvents
D216	Paint Industril	-Sludges
		-Used solvent
D217	Dry cell batteries	-Sludges
		-Paste
		-Expired batteries
D218	Wet cell batteries	-Sludge
		-Dust
D219	Electronic components and assembly	-Sludge
		-Used solvents
D220	Oil and natural gas exploration -Exploration and production -Maintenance of production facilities	-Residues of oil emulsions
		-Drilling mud
		-Sludge
D221	Petroleum refining, dissolved air flotation, heat exchanger tankbottoms	-Sludge
		-Catalysts
		-Activated carbon
		-Catalysts
D222	Mining	-Heavy metal sludge
		-Solvents
D223	Steam electric power generation, Fly ash, bottom ash	
D224	Leather tanning and finishing	-Sludge
		-Used solvent
D225	Dyestuff industry	-Sludges
		-Used solvents
D226	Pharmaceutical	-Sludge
		-Used solvent
		-Off specification product
D227	Hospitals and laboratories	-Expired antibiotics
		-Contaminated packaging medical instruments
		-Medicine packaging
D228	Commercial and research laboratories	-Used solvents
		-Expired chemical
		-Sample residues

Table 3
List of Hazardous Waste from Everdue Chemicals that are Expired, Spilled,
Package Residue or Off-Specification Products

Waste Code	Pollutant
D3001	Acetaldehyde
D3002	Acetamide
D3003	Acetic acid, salts and esters
D3004	Acetone
D3005	Acetonitrile
D3006	Acetylchloride
D3007	Acrolein
D3008	Acrylamide
D3009	Acrylonitrile
D3010	Aldrin
D3011	Aluminium alkyl compounds
D3012	Aluminium phosphide
D3013	Amonium picrate
D3014	Amonium vanadate
D3015	Aniline
D3016	Arsenic
D3017	Arsenic oxide
D3018	Arsine, diethyl
D3019	Barium
D3020	Barium cyanide
D3021	Benzene
D3022	Chloro, benzene
D3023	Benzene, 1,3-Diisocyanatomethyl
D3024	Diethyl, benzene
D3025	Hexahydro, benzene
D3026	Benzenasulfonic acid chloride
D3027	Benzenesulfonyl chloride
D3028	Beryllium and its compounds
D3029	Bis(chloromethyl) ether
D3030	Bromoform
D3031	1,1, 2, 3, 4, 4-hexachloro-1, 3-Butadiene
D3032	n-Butyl alcohol
D3033	Butane
D3034	Butyl aldehyde
D3035	Cadmium
D3036	Calcium chromate
D3037	Amoniacal copper arsenate
D3038	Carbonic dichloride
D3039	Carbon disulfide

D3040	Carbon tetrachloride
D3041	Chloroacetaldehyde
D3042	Chlorodane, alfa & gamma isomers
D3043	Chlorethane (ethylchloride)
D3044	Chloroethane (vinyl chloride)
D3045	Chlorodibromomethane
D3046	Chloroform
D3047	p-Chloroaniline
D3048	2-Chloroethyl vinyl ether
D3049	Chloromethyl methyl ether
D3050	Chromic acid H ₂ CrO ₄ , calcium salts
D3051	Chromium
D3052	Cyanide
D3053	Creosote
D3054	Cumene
D3055	Cyclohexane
D3056	2, 4-D, salts and esters
D3057	DDD
D3058	DDT
D3059	1, 2-Dichlorobenzene
D3060	1, 3- Dichlorobenzene
D3061	1,2 Dichloroethene
D3062	1, 1-Dichloroethene
D3063	1, 2-Dichloropropane
D3064	1, 2-Dichloropropylene
D3065	Dieldrin
D3066	Dimethyl phthalate
D3067	Dimethyl sulfato
D3068	2, 4-Dinitrotoluene
D3069	2, 6-Dinitrotoluene
D3070	Endrin and its metabolites
D3071	Epichlorohydrin
D3072	Ethanol, 2-ethoxy
D3073	Ethanone, 1-phenyl
D3074	Ethyl acrylate
D3075	Ethyl acetate
D3076	Ethylbenzene
D3077	Ethyl carbamate (urethane)
D3078	Ethyl ether
D3079	Ethylene bisditiocarbamic acid, salts & ester
D3080	Ethylene dibromide
D3081	Ethylene dichloride

D3082	Ethylene glycol (monoethyl ether)
D3083	Ethylene oxide (Oxirane)
D3084	Fluorine
D3085	Fluoroacetamide
D3086	Fluoroacetic acid, sodium salt
D3087	Formaldehyde
D3088	Formic acid
D3089	Furan
D3090	Heptachlor
D3091	Hexachlorobenzene
D3092	Hexachlorobutadiene
D3093	Hexachloroethane
D3094a	Hydrogen cyanide
D3095a	Hydrazine
D3094	Hydrogen phosphide
D3095	Hydrogenfluoric acid
D3096	Hydrogen fluoride
D3097	Hydrogen sulfide

D3098	Hydroxybenzene (phenol)
D3099	Hydroxytoluene (cresol)
D3100	Isobutyl alcohol
D3101	Isobutanol
D3102	Lead acetate
D3103	Lead chromate
D3104	Lead nitrate
D3105	Lead oxide
D3106	Lead phosphate
D3107	Lindane
D3108	Maleic anhydride
D3109	Maleic hydrazide
D3110	Mercury
D3111	Methyl hydrazine
D3112	Methyl parathion
D3113	Methane, tetrachloro
D3114	Methane, tribromo
D3115	Methane, trichloro
D3116	Methane, trichlorofluoro
D3117	Methanol
D3118	Methoxychlor
D3129	Methyl bromide
D3121	Methyl chloride
D3122	Methyl chloroform

D3123	Methylene bromide
D3124	Methyl isobutil ketone
D3125	Methyl ethyl ketone (MEK)
D3126	Methyl ethyl ketone peroxide
D3127	Methyl benzene (toluene)
D3128	Methyl iodide
D3129	Naphthalene
D3130	Nitric oxide
D3131	Nitrobenzene
D3132	Nitroglycerine
D3133	Oxyrane
D3134	Parathion
D3135	Paraldehyde
D3136	Pentachlorobenzen
D3137	Pentachloroethane
D3138	Pentachloronitrobenzene
D3139	Pentachlorophenol
D3140	Perchloroethylene
D3141	Phenol
D3142	Phenyl thiourea
D3143	Phosgene
D3144	Phosfine
D3145	Phosphoric acid
D3146	Phosphorous sulfide
D3147	Phosphorous pentasulfide
D3148	Phtatic anhydride
D3149	1-Bromo, 2-propanone
D3150	Propane, 2-nitro
D3151	n-Propylamine
D3152	Propylene Dichloride
D3153	Pyrene
D3154	Pyridene
D3155	Selenium
D3156	Selenium dioxide
D3157	Selenium sulfide
D3158	Silver cyanide
D3159	Silver (2, 4, 5-TP)
D3160	Sodium azide
D3161	Strychnine, and salts
D3162	Sulfuric Acid, Dimethyl Ester
D3163	Sulfur Phosphide
D3164	2, 4, 5-T
D3165	1,2,4, 5-Tetrachlorobenzene

D3166	1, 1, 1, 2-Tetrachloroethane
D3167	1, 1, 2, 2-Tetrachloroethane
D3168	2, 3, 4, 6-tetrachlorophenol
D3169	Tetrachloromethane
D3170	Tetra ethyl lead
D3171	Toluene
D3172	2, 4, 5-Trichlorophenol
D3173	2, 4, 6-Trichlorophenol
D3174	1, 3, 5-Trinitrobenzene
D3175	Vanadium oxide
D3176	Vanadium pentaoxide
D3177	Vinyl chloride
D3178	Warpharin
D3179	Dimethylbenzene
D3180	Zinc Phosphide, when present at concentrations >10%

**ELUCIDATION
REGULATION REGARDING
HAZARDOUS AND TOXIC WASTE MANAGEMENT
Government Regulation Number 19 of 1994**

GENERAL

Development activities are aimed at improving the welfare and quality of life of the people. They are implemented through the long-term development plan, which is supported by industrial development. Industrial development on the one hand will produce goods which are beneficial to the welfare of the people, while on the other hand will produce waste. Among the waste produced by industrial activities are hazardous and toxic (B3) wastes. Disposal human health and other living organisms. Considering the above risks, efforts should be made to minimize the amount of B3 waste produced by every activity. Attempts should be made to keep B3 waste at zero, among other things by reduction at the source by processing of material, substitution of material, regulating the operations, and By clean technology. To eliminate or reduce its hazardous and toxic characteristics, the B3 waste produced must be managed in a specific manner.

The management of B3 waste comprises a series of operation such as storage, collection, transportation, processing, and dumping of B3 waste. Several parties are involved in these series of activities, each of them forming a link in B3 waste management, i.e.:

- a. the waste producer;
- b. the B3 waste collector;
- c. the B3 waste transporter;
- d. the B3 waste processor.

Through the management of the waste as mentioned above, the life cycle of the B3 waste, from its production by the B3 waste producer up to its final disposal by the B3 waste processor, can be controlled. Each cycle must be regulated, while the routing of the B3 waste is controlled by a system of documents in the form of the B3 waste manifest. With this system, it will be possible to check the amount of B3 waste produced, processed and finally disposed.