

CHAPTER 8

INDUSTRIAL WASTE SURVEY

8. INDUSTRIAL WASTE SURVEY

8.1 Objectives

The objectives of the Industrial Waste Survey was to investigate the present situation of industrial waste management in Metro Manila.

8.2 Regulatory Base

The regulatory base for handling of industrial and hazardous waste in the Philippines is the Republic Act 969: Toxic Substances and Hazardous and Nuclear Waste Control Act, 1990, and DENR Administrative Order 29, 1992: general implementing rules and regulations for Republic Act 969.

The regulatory agencies involved in matters related to industrial and hazardous waste and their relationship is displayed in Figure 8.1.

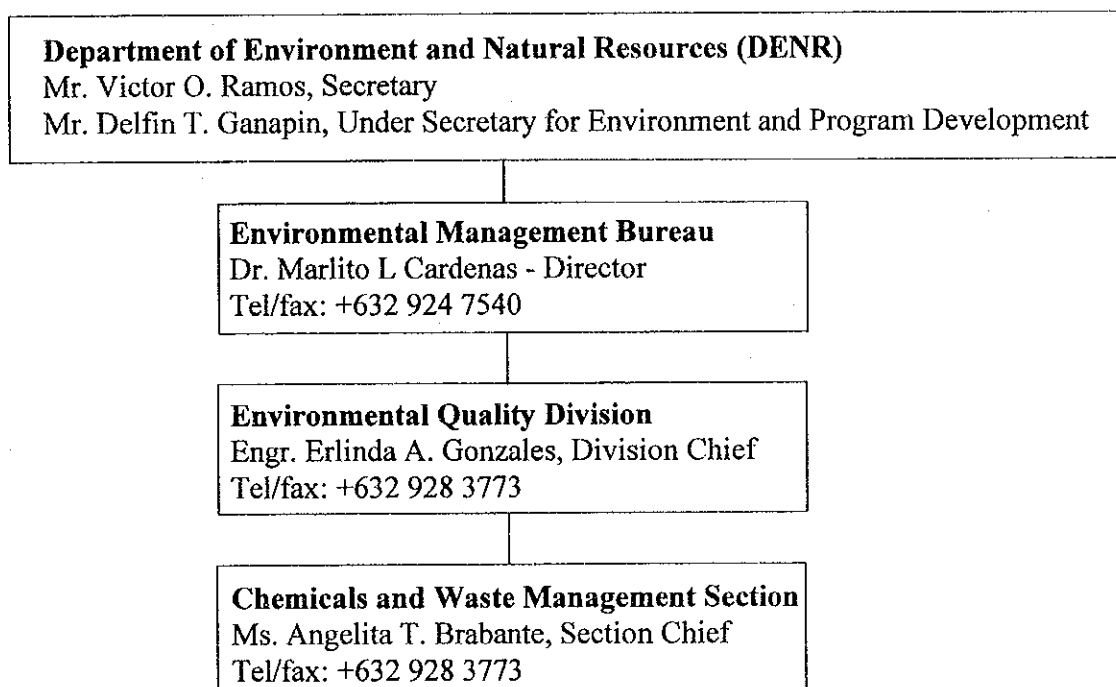


Figure 8.1 Regulatory agencies involved in matters related to industrial and hazardous waste

8.3 Methodology

In accordance with Section 26 of DAO 29, the Environmental Management Bureau (EMB) of DENR in 1993 initiated a nationwide hazardous waste registration activity and required all the industries to register the type and quantity of waste they are generating, treating and disposing. In early 1995, EMB compiled, tabulated and

entered the registration results from 162 companies into a specially designed Hazardous Waste Tracking Database. The industrial waste survey carried out is based on data from this database.

8.4 Results

Results from the industrial waste survey is presented in the following Tables.

Table 8.1 Company Description

INST_ID	INSTNAME	CATEGORY	PSIC1	PSIC2	AUTH_CAP	TURNOVER	TOTL_EMPL	MANU_EMPL
13-77-0001	La Tondeña Distillers, Inc.	3131					1,093	767
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134						
13-77-0003	SMPP - Farola Carton Plant	3412			200,000,000.00	1	169	94
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	3514		30,000,000.00	1	138	20
13-77-0005	YSS Laboratories Company, Inc.	3522			20,000,000.00	2	75	45
13-77-0006	Procter and Gamble Philippines, Inc.	3523			500,000,000.00	100	2,100	1,500
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523					1,323	1,000
13-77-0008	SMC - Plastic Case Plant	3560			130,165,000.00		89	53
13-77-0009	SMC - Mold Manufacturing Plant	3620			47,000,000.00		81	42
13-77-0010	SMC-SMPP-Farola Packaging Products (Mla. Glass)	3620					1,123	
13-77-0011	PNOC Shipping and Transport Corporation	7132			500,000,000.00	38	586	250
13-77-0012	EXXON Chemical Philippines	3540			9,000,000.00		24	
13-77-0013	Constant Plating Center				500,000.00	-	40	-
13-77-0014	Well Ever Electroplating Shop					-	-	-
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3117			20,000,000.00		180	120
13-78-0002	P.I. Manufacturing, Inc.	3833	3819		50,000,000.00	-	166	103
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511			300,000,000.00	-	11	2
13-78-0004	San Miguel Corporation - Polo Brewer	3133					1,115	980
13-78-0005	Padoson Stainless Steel Corporation	3812			12,000,000.00		94	68
13-78-0006	Mayer Steel Pipe Corporation	3712			20,000,000.00		207	169
13-78-0007	Continental Steel Manufacturing Corporation	3712					100	100
13-78-0008	Cleveland Textile Mills, Inc.				25,000,000.00	-	32	3
13-78-0009	Essential Manufacturing				554,408.00		25	10
13-78-0010	Moldex Products, Inc.						236	99
13-78-0011	Polyglass International Manufacturing Corp.				40,000,000.00	-	100	76
13-78-0012	FEJEA Enterprises				100,000.00	-	4	-
13-78-0013	Inter-World Steel Mills, Inc.	3710			5,000,000.00		108	86
13-78-0014	Grand Cathay Food Mfg., Corporation	3124			4,000,000.00		25	23
13-78-0015	Mixwel Food Products, Inc.	3124			9,600,000.00		20	18
13-78-0016	Metal Plus Industries	3720			134,785.00		10	10
13-78-0017	Fastbrite Industrial Plating Corp.							
13-78-0018	Grace Park Industries, Inc.	3320			4,000,000.00	20,165	200	180
13-78-0019	Luxury Metal Manufacturing Corp.	3720			5,000,000.00		40	28
13-78-0020	Dyson Surface Coating Corp.				3,000,000.00	10	36	-
13-78-0021	New. M.E. Moses Enterprises				1,000,000.00		25	20
13-78-0022	Geltech Electroplating				500,000.00		5	4
13-78-0023	Polymedic General Hospital				10,000,000.00		382	

EMB Hazardous Waste Tracking Database

AUTHORIZED CAPITALIZATION

INST_ID	INSTNAME	CATEGORY	PSIC1	PSIC2	AUTH_CAP	TURNOVER	TOTL_EMPL	MANU_EMPL
13-78-0024	Signal Electric Ind. Inc.	3111			10,000,000.00		48	20
13-79-0001	Purefoods Corporation	3113			49,600,000.00		384	229
13-79-0002	Philippine Dairy Products Corporation	3129			20,000,000.00		200	140
13-79-0003	SYSU International, Inc.	3511			2,000,000.00		12	7
13-79-0004	Qualitech Chemical Corp.	3511			300,000,000.00	1	34	13
13-79-0005	Consolidated Industrial Gases, Inc.-Balintawak	3521					115	43
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3521			25,000,000.00		99	27
13-79-0007	Cardinal Industrial, Inc.	3523			1,000,000.00		48	45
13-79-0008	Manufacturing Services and Trade Corporation	3523			500,000,000.00	2	106	57
13-79-0009	Piipinas Kao, Inc. (Household Division)	3529			30,000,000.00		212	44
13-79-0010	Republic Chemical Industries, Inc.	3551			5,000,000,000.00		827	622
13-79-0011	Sime Darby Pilipinas, Inc.	3825			15,500,000.00		452	405
13-79-0012	Labtech Manufacturing Industries	3834			280,000,000.00		811	596
13-79-0013	C. C. Unson Co., Inc.	3836			10,000,575.00		225	221
13-79-0014	Data General Phils., Inc.	6170			1,000,000.00		11	
13-79-0015	Trust Chemicals, Inc.	3211			3,000,000.00		1,758	850
13-79-0016	General Textiles, Inc.	3521			20,000,000.00	37	107	85
13-79-0017	Twin Aces Industries, Inc.	3529			5,000,000.00		107	90
13-79-0018	Kolora Ink and Chemical Corporation				200,000.00	350	8	6
13-79-0019	Paron Trading				1,000,000.00		54	49
13-79-0020	Hi-Tex Industrial Corporation	2221	0				54	49
13-79-0021	Union Refinery Corp.	3710			200,000,000.00		173	161
13-79-0022	MKK Steel Corporation	3134			1,000,000,000.00	212	695	195
13-79-0023	Cosmos Bottling Corporation	3115			10,000,000.00		54	54
13-79-0024	Maunlad Canning Corporation	3124			800,000.00		30	28
13-79-0025	Rose Food Product Corp.	3529			4,000,000.00		39	36
13-79-0026	Philippine Ink Corporation	3117		3523	25,000,000.00		180	35
13-79-0027	Malabon Soap and Oils Ind. Corp.				4,000,000.00		53	48
13-79-0028	State Manufacturing Ind.				5,500,000.00		36	30
13-79-0029	JVC Steam Laundry, Inc.	3514			75,000,000.00	1	95	25
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3112			53,000,000.00		437	151
13-80-0002	Mead Johnson Philippines, Inc.	1211		2110	80,000,000.00		939	48
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1213			80,000,000.00	55	939	432
13-80-0004	Monterey Farms Corporation (Piggery)	9730			5,000,000.00		70	55
13-80-0005	Great Effect Enterprises Inc.	3134			20,000,000.00		19	6
13-80-0006	Pepsi-Cola Far East Trade Devt. Co., Inc.	3222			225,000,000.00		1,778	1,006
13-80-0007	Solid Mills, Inc.							

EMB Hazardous Waste Tracking Database

AUTHORIZED CAPITALIZATION

INST_ID	INSTNAME	CATEGORY	PSIC1	PSIC2	AUTH_CAP	TURNOVER	TOTL_EMPL	MANU_EMPL
13-80-0008	Packaging Products Corporation		3412		100,000,000.00	5	191	106
13-80-0009	Metoxide Philippines Corporation		3511		10,000,000.00		30	20
13-80-0010	Easy Grow Industries, Inc.		9730		3,000,000.00		60	50
13-80-0011	Rohm and Haas Philippines, Inc.		3511	3529	100,000,000.00	3	41	28
13-80-0012	Union Ajinomoto, Inc.		3511		115,000,000.00	5	620	538
13-80-0013	Unilox Industrial Corporation		3511		20,000,000.00		53	28
13-80-0014	Resins, Inc.		3511		500,000,000.00	20	319	213
13-80-0015	Chemphil-LMG, Inc. (Inorganic Division)		3511		200,000,000.00		200	75
13-80-0016	Trimex Chemical Industries Corp.		3511		1,000,000.00			
13-80-0017	Polyphosphates, Inc.		3511		200,000,000.00	2	138	133
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)		3511		12,000,000.00		159	76
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy		3511		300,000,000.00	9	163	2
13-80-0020	Borden International Philippines, Inc.		3515		50,000,000.00	10	69	61
13-80-0021	Polymer Chemicals, Inc.		3513		30,000,000.00	2	43	23
13-80-0022	EM-POL Corporation		3513		30,000,000.00	2	25	15
13-80-0023	Kemwerke, Incorporated		3513		25,000,000.00		24	11
13-80-0024	Hoechst Philippines, Inc.		3514		40,000,000.00		110	23
13-80-0025	Wrigley Philippines, Inc.		3124		37,000,000.00	5	272	201
13-80-0026	Fuller O'Brien Paint Co., Inc.		3521		10,000,000.00		152	72
13-80-0027	Nippon Paint Philippines, Inc.		3521		125,000,000.00		142	43
13-80-0028	Dutch Boy Philippines, Inc.		3521		75,000,000.00		325	155
13-80-0029	BASF Coatings and Inks Phils. Inc.		3521		53,000,000.00	2	142	82
13-80-0030	Atlantic Coatings, Inc.		3521		20,000,000.00	8	62	34
13-80-0031	Charter Chemicals and Coating Corporation		3521		2,200,000.00		120	80
13-80-0032	Roosevelt Chemical, Inc.		3521		5,000,000.00		250	
13-80-0033	BOIE Incorporated		3522		10,000,000.00		159	63
13-80-0034	Boie-Takeda Chemicals, Inc.		3522		20,000,000.00		120	
13-80-0035	Boots Pharmaceuticals (Phils.), Inc.		3522		10,000,000.00		76	
13-80-0036	Merck, Inc.		3522		30,000,000.00		128	
13-80-0037	Bayer Philippines, Inc./Healthcare Division		3522		8,000,000.00		131	70
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.		3522				472	57
13-80-0039	Sterling Products International, Inc.		3522		490,000,000.00	44	105	89
13-80-0040	Abbot Laboratories (Philippines)		3522		2,500,000,000.00	128	442	692
13-80-0041	United Laboratories, Inc.		3522		60,000,000.00		2,212	139
13-80-0042	Warner Lambert Philippines, Inc.		3522				501	946
13-80-0043	Interphil Laboratories, Inc.		3522				1,042	
13-80-0044	GX International, Inc.		3522		5,000,000.00		54	1

AUTHORIZED CAPITALIZATION

INST_ID	INSTNAME	CATEGORY	PSIC1	PSIC2	AUTH_CAP	TURNOVER	TOTL_EMPL	MANU_EMPL
13-80-0045	Pfizer, Inc.		3522		170,000,000.00	-	359	135
13-80-0046	Colgate-Palmolive Philippines, Inc.		3523		400,000,000.00		826	480
13-80-0047	Johnson and Johnson (Philippines), Inc.		3523		65,000,000.00		540	250
13-80-0048	H.B. Fuller (Philippines), Inc.		3529		75,000,000.00		38	9
13-80-0049	Resicor Enterprises, Inc.		3529		1,000,000.00		13	5
13-80-0050	Asian Chemical Corporation		3540		50,000,000.00		15	3
13-80-0051	Philippine Glass Bulbs		3620		6,300,000.00		62	50
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)		3812		100,000,000.00		299	181
13-80-0053	Pilipinas YTK Industry, Inc.		3819		10,000,000.00		83	64
13-80-0054	Rowell Lithography and Metal Closure, Inc.		3819		50,000,000.00	160	259	121
13-80-0055	Philips Semiconductor Phils., Inc.		3825		250,000,000.00		1,833	1,499
13-80-0056	Pacific Semiconductors, Inc.		3825		104,000,000.00	480	1,899	1,227
13-80-0057	Motorola Philippines, Inc.		3825		30,000,000.00		1,718	1,531
13-80-0058	Zilog Philippines, Inc.		3825				640	465
13-80-0059	AMI (Philippines), Inc.		3825		33,074,500.00		879	656
13-80-0060	Amkor/Anam Pilipinas, Inc.		3825		77,833,333.00		2,265	1,560
13-80-0061	Automated Microelectronics, Inc.		3825		500,000,000.00		784	490
13-80-0062	Philips Consumer Products		3832				85	64
13-80-0063	Eveready Battery Company (Philis.), Inc.		3834		55,000,000.00	12	357	281
13-80-0064	Philips Electronics and Lighting, Inc.		3839		300,000,000.00		430	220
13-80-0065	3M Phils., Inc.		3909		100,000,000.00	3	217	79
13-80-0066	Elan Pharma Phils., Inc.		6170		22,000,000.00		73	
13-80-0067	Wellcome Philippines, Inc.		6170		55,000,000.00		136	
13-80-0068	G. D. Searle Philippines, Inc.		6170		50,000,000.00		105	
13-80-0069	RP Chem. Inc.		6170		30,000,000.00		21	
13-80-0070	Alcon Laboratories (Phil.) Inc.		6170		25,000,000.00		43	
13-80-0071	ARMEDIC Philippines, Inc.		6170		716,400.00		141	
13-80-0072	Schering Philippine Corporation		6170		14,000,000.00		85	
13-80-0073	Marsman and Co., Inc.		6170		100,000,000.00		538	
13-80-0074	Upjohn Inc.		6170		60,000,000.00	12	142	
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.		6170		60,000,000.00		144	
13-80-0076	Sanofi Philippines, Inc.		6170		60,000,000.00		49	
13-80-0077	Boehringer Ingelheim Phils., Inc.		6170		44,634,300.00	10	242	
13-80-0078	Panelon Philippines, Inc.		3211		6,000,000.00		31	25
13-80-0079	Integral Chemical Corporation		3511		1,500,000.00		121	70
13-80-0080	GST Philippines, Inc.		3712		62,500,000.00		279	233
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.		3560		10,000,000.00		59	30

AUTHORIZED CAPITALIZATION

INST_ID	INSTNAME	CATEGORY	PSIC1	PSIC2	AUTH_CAP	TURNOVER	TOTL_EMPL	MANU_EMPL
13-80-0082	NAPOCOR - Maintenance Engineering Center		3860				340	
13-80-0083	Allegro Microsystems Phils., Inc.		3825		40,000,000.00	103	1,020	710
13-80-0084	Epic Electronics Industries Corporation		3825				198	147
13-80-0085	Chemphil Albright & Wilson Corp.		3511		200,000,000.00	2	138	133
13-80-0086	Honda Philippines, Inc.		3846		170,000,000.00	10	445	326
13-80-0087	Alpolac, Incorporated		3513		20,000,000.00		11	6
13-80-0088	Astron Philippines Inc.		3832		10,000,000.00	7	479	221
13-80-0089	Manila Electric Company				8,000,000.00		8,600	
13-80-0090	L.G.Fernandez Plating Services						11	
13-80-0091	CD Electroplating and Fabrication, Inc.						10	
13-80-0092	American Packing Industries (Phils.) Corp.				35,000,000.00		72	45
13-80-0093	Borden International Phils., Inc.		3513					75
13-80-0094	BOIE Incorporated		3522		10,000,000.00		173	100
13-80-0095	Gelmart Industries Phils., Inc.		3210	3220	60,000,000.00	700	7,000	6,500

Table 8.2 General Description of Business/Operations and Major Products

INST_ID	INSTNAME	PSIC1	PSIC2	MPRODUCT1	MPRODUCT2	MPRODUCT3
13-78-0023	Polymedic General Hospital					
13-79-0029	JVC Steam Laundry, Inc.			Twill pants/short	Denim pants/short	
13-79-0028	State Manufacturing Inc.			Zippers		
13-79-0020	Hi-Tex Industrial Corporation			Washed garments		
13-79-0019	Paron Trading			Printed circuit board		
13-78-0024	Signal Electric Ind. Inc.			Nickel chrome	Galvanize	Zinc
13-78-0022	Gettech Electroplating					
13-78-0021	New M.E. Moses Enterprises					
13-78-0020	Dyson Surface Coating Corp.				Powder coating for bicycles	
13-78-0017	Fastbrite Industrial Plating Corp.					
13-78-0012	FEJEA Enterprises				PVC tiles	UPVG
13-78-0011	Polyglass International Manufacturing Corp.			Acrylic sheets		
13-78-0010	Moldex Products, Inc.			PVC pipes	PE/PB pipes	
13-78-0009	Essential Manufacturing			Soy sauce		
13-80-0091	CD Electroplating and Fabrication, Inc.					
13-80-0092	American Packing Industries (Phils.) Corp.					
13-78-0008	Cleveland Textile Mills, Inc.			Casket		
13-80-0090	L.G. Fernandez Plating Services			Dyed Knitted Fabrics		
13-80-0089	Manila Electric Company					
13-77-0013	Constant Plating Center					
13-77-0014	Well Ever Electroplating Shop					
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1211		Plaques	Nameplates	
13-80-0004	Monterey Farms Corporation (Piggery)	1213	2110	Calf for contract growers	Finishers	Culls
13-79-0021	Union Refinery Corp.	2221	0	Motor oil	Finishing pigs	Culls
13-79-0001	Purefoods Corporation	3111			Gear oil	Industrial oil
13-80-0002	Mead Johnson Philippines, Inc.	3112		Sustagen		
13-79-0002	Philippine Dairy Products Corporation	3113		Anchor/Magnolia Butter	Enfapro	Enfapro
13-79-0024	Maunlad Canning Corporation	3115		Youngs Town sardines	Buttercup/Baker's Best	Magnolia Cheezee/Cheesefood
13-79-0027	Malabon Soap and Oil Ind. Corp.	3117	3523	Cooking oil	Goldcup sardines	Youngs Town squid
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3124		Coconut edible oil	Lard	Margarine
13-78-0014	Grand Cathay Food Mfg. Corporation	3124		Candies		
13-80-0025	Wrigley Philippines, Inc.	3124		Chewing gum		
13-78-0015	Mixwel Food Products, Inc.	3124		Glucose syrup		
13-79-0025	Rose Food Product Corp.	3129		Preserves (local and western)	McCormick spices	
13-79-0003	SYSU International, Inc.	3131		Ginebra San Miguel		
13-77-0001	La Tondicha Distillers, Inc.	3131		Beer		
13-78-0004	San Miguel Corporation - Polo Brewer	3133		Pepsi flavor/acidulant		
13-80-0006	Pepsi-Cola Far East Trade Dev't. Co., Inc.	3134		Popoola	7Up flavor/salt	Mountain Dew flavor/salt
13-79-0023	Cosmos Bottling Corporation	3134		Coca-cola	Sarsi	Cheers orange
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3210		Brassieres, Corsets, Panties	Sprite	Royal Tru-orange
13-80-0095	Gelhart Industries Phils., Inc.	3211		Printed fabrics	Children's wear	Swimwear
13-79-0016	General Textiles, Inc.	3211	3220	Fabrics interlining	Dyed fabrics	White fabrics
13-80-0078	Parelon Philippines, Inc.	3211		Denims		
13-80-0007	Solid Mills, Inc.	3222		Doors	Non-denims	
13-80-0018	Grace Park Industries, Inc.	3320		Corrugated carton boxes	Furniture	
13-80-0008	Packaging Products Corporation	3412		Corrugated carton pads	Corrugated carton pads	Corrugated carton partitions
13-77-0003	SMPP - Parola Carton Plant	3511		Carbon dioxide	Medical/industrial oxygen	Nitrous oxide (USP)
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)	3511		Chemicals for textile/non-textile	Chemicals for laundry and housekeeping	Dyes and optical brighteners
13-80-0016	Trimex Chemical Industries Corp.	3511		Compressed oxygen gas		
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy	3511		Sodium tripolyphosphate (STPP)	Tetrasodium pyrophosphate (TSP)	Phosphoric acid, T. G.
13-80-0017	Polyposphates, Inc.					

GENERAL DESCRIPTION OF BUSINESS/OPERATIONS AND MAJOR PRODUCTS

INST ID	INSTNAME	PSIC1	PSIC2	MPRODUCT1	MPRODUCT2	MPRODUCT3
13-80-0015	Chemphill-LMG, Inc. (Inorganic Division)	3511		Sulfuric acid, battery grade	Oleum	Detergent sulfur flakes
13-80-0013	Unilox Industrial Corporation	3511		Battery grade oxide	Red lead	Litharge
13-80-0011	Rohm and Haas Philippines, Inc.	3511	3529	AC-507	AC-388	AC-6501
13-80-0009	Metoxide Philippines Corporation	3511		Zinc oxide	Paint raw materials	Leather auxiliaries
13-79-0004	Qualitech Chemical Corp.	3511		Textile auxiliaries	Sulfuric acid	Phthalic anhydride
13-80-0014	Resins, Inc.	3511		Aluminum sulfate	Chemical solvents	Organophosphates (pesticides)
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511		Compressed oxygen gas	Disolved acetylene	Phosphoric acid (technical grade)
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	3514	Compressed oxygen gas	Potassium silicate	Liquid fertilizer
13-79-0005	Consolidated Industrial Gases, Inc.-Batnava	3511		Sodium silicate	Tetrasodium pyrophosphate	Maleic esters
13-80-0079	Integral Chemical Corporation	3511		Sodium tripolyphosphate	Soy sauce	Modified alkyl resins
13-80-0085	Chemphill Albright & Wilson Corp.	3511		Monosodium glutamate (MSG)	Bodied oils	Phenol-formaldehyde
13-80-0012	Union Aluminob, Inc.	3513		Alkyl resin	Acrylic solutions	Driers
13-80-0023	Kemwerke, Incorporated	3513		Latex emulsions	Urea-formaldehyde Powder resins	Thiobencarb
13-80-0087	Alpolac, Incorporated	3513		Formalin	Acrylic resins	Hostathion
13-80-0093	Borden International Phils., Inc.	3513		Emulsion resins	Trebon EC	Phenol-formaldehyde (PF) liquid/powder resins
13-80-0022	EM-POL Corporation	3513		Alkyl resins	Hopchin	
13-80-0021	Polymer Chemicals, Inc.	3513		Sevin (Carbaryl) Powders	Urea-formaldehyde (UF) powder resins	
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514		Decis	Water-based paints	Flat enamel white
13-80-0024	Hoechst Philippines, Inc.	3514		Formalin	Quick dry enamel white	Roofmaster-all colors (water-based)
13-80-0020	Borden International Philippines, Inc.	3515		Paints - Industrial & marine type chemicals for maintenance	Quick drying enamel (solvent-based)	Container coatings
13-79-0007	Cardinal Industrial, Inc.	3521		Paints	Oil inks	
13-80-0032	Roosevelt Chemical, Inc.	3521		Solvent-based enamels	Marine paints	Turco chemical processing compounds
13-80-0031	Charter Chemicals and Coating Corporation	3521		Flat latex white	Autorefinish paint	House paint
13-80-0030	Atlantic Coatings, Inc.	3521		Latex (water-based)	2 Car Paints	3 Furniture Finishes
13-80-0028	Dutch Boy Philippines, Inc.	3521		Automotive paints	Penicillins/non-penicillins	Laxatives
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521		House paint (latex base, alkyl base and oil base)	Erythrocin 500 mg FT	Normosol-M in DSW
13-79-0008	Pacific Paint and Oil Manufacturing, Inc.	3521		Industrial paint	Relief for sore throat	Antirheumatic
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521		1 House Paints	TM skin antibiotic	Trosyd
13-80-0027	Nippon Paint Philippines, Inc.	3521		Analgesic/antipyretics	Antiasthma (Terbutaline)	Antibacterial (Cefalexin)
13-79-0017	Twin Aces Industries, Inc.	3522		Dextrose 5% in LRS	Cough syrups	Antidiarrheals
13-80-0034	BOIE Incorporated	3522		Analgesics	Pain reliever	Life saving drugs
13-80-0040	Abbot Laboratories (Philippines)	3522		Pharmaceuticals	Gardan	Astringe-o-sol
13-80-0035	Boots Pharmaceuticals (Phil.), Inc.	3522		Visine	Pulmonary (Bricanyl)	Antibiotics (Pengoibe)
13-77-0005	YSS Laboratories Company, Inc.	3522		Antihypertensive (Metoprolol)	Adalat 10mg capsule	Adalat gits 30mg tablet
13-80-0045	Pfizer, Inc.	3522		Multivitamins (syrups, tablets and capsules)	Pigments	Fine chemicals
13-80-0044	GX International, Inc.	3522		Antibiotics	Penicillins/Non-penicillins	Laxatives
13-80-0043	Interphill Laboratories, Inc.	3522		Cortal 500	Ponstan	Lopid
13-80-0041	United Laboratories, Inc.	3522		Cardiovascular (Betaloc)	Bath/Laundry soap	Shampoo
13-80-0038	Sterling Products International, Inc.	3522		Adalat 5mg capsule	Dental cream	Soaps
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522		Pharmaceuticals	Facial cleanser	Body cleanser
13-80-0036	Merck, Inc.	3522		Analgesics/Antipyretics	Toilet soaps	Detergent granules
13-80-0033	BOIE Incorporated	3522		Halls	Johnson's Baby Oil	Johnson's Baby Cologne
13-80-0034	Boie-Takeda Chemicals, Inc.	3522		Detergent bar/powder		
13-80-0042	Warner Lambert Philippines, Inc.	3523		Shampoo		
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523		Shampoo and conditioner		
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523		Syndet Bars		
13-79-0009	Philippas Kao, Inc. (Household Division)	3523		Toilet soap		
13-77-0006	Procter and Gamble Philippines, Inc.	3523		Johnson's Baby Powder		
13-79-0008	Manufacturing Services and Trade Corporation	3523				
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523				

GENERAL DESCRIPTION OF BUSINESS/OPERATIONS AND MAJOR PRODUCTS

INST ID	INSTNAME	PSIC1	PSIC2	MPRODUCT1	MPRODUCT2	MPRODUCT3
13-79-0026	Philippine Ink Corporation	3529		Letterpress/Offset RM		
13-79-0010	Republic Chemical Industries, Inc.	3529		Epoxies		
13-79-0018	Kolera Ink and Chemical Corporation	3529		Oil Based Printing Inks		
13-80-0049	Rescor Enterprises, Inc.	3529		Additives for plastics, water treatment		
13-80-0048	H.B. Fuller (Philippines), Inc.	3529		Hotmelt adhesives		
13-77-0012	EXXON Chemical Philippines	3540		Solvent blends		
13-80-0050	Asian Chemical Corporation	3540		Petrochemical solvents		
13-79-0011	Sime Darby Philippines, Inc.	3551		Tires		
13-77-0008	SMC - Plastic Case Plant	3560		Plastic crates		
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.	3560		Transparent sheetings		
13-77-0010	SMC-SMPP-Farola Packaging Products (Mia. Glass)	3620		Glass containers (bottles)		
13-77-0009	SMC - Mold Manufacturing Plant	3620		Glass mold		
13-80-0051	Philippine Glass Bulbs	3620		Glass bulbs		
13-78-0013	Inter-World Steel Mills, Inc.	3710		Steel bars		
13-79-0022	MKK Steel Corporation	3710		Grinding balls		
13-80-0080	GST Philippines, Inc.	3712		BI pipes		
13-78-0006	Mayer Steel Pipe Corporation	3712		Deformed bars (reinforcement)		
13-78-0007	Continental Steel Manufacturing Corporation	3720		Bags and shoes accessories		
13-78-0019	Luxury Metal Manufacturing Corp.	3720		Rings for ladies bags, school and travelling bags		
13-78-0016	Metal Plus Industries	3812		PNS-275 (G-40)		
13-78-0005	Padoson Stainless Steel Corporation	3812		PNS-275 (G-40)		
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3819		Metal		
13-80-0053	Philippine YTK Industry, Inc.	3819		Crown caps		
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819		Integrated circuits		
13-80-0083	Allegro Microsystems Phils., Inc.	3825		Printed circuit board		
13-80-0084	Epic Electronics Industries Corporation	3825		Semiconductors		
13-80-0055	Philips Semiconductor Phils., Inc.	3825		Plastic packages		
13-80-0056	Pacific Semiconductors, Inc.	3825		14/16L D Dip integrated circuit		
13-80-0057	Motorola Philippines, Inc.	3825		Integrated circuits		
13-80-0058	Zilog Philippines, Inc.	3825		Integrated circuits		
13-80-0059	AMI (Philippines), Inc.	3825		Integrated circuits		
13-80-0060	Ankor/Anam Philippines, Inc.	3825		Integrated circuits		
13-80-0061	Automated Microelectronics, Inc.	3825		Integrated circuits		
13-79-0012	Labtech Manufacturing Industries	3832		Axial diodes		
13-80-0068	Astron Philippines Inc.	3832		Karaoke		
13-80-0062	Philips Consumer Products	3832		Colored television		
13-78-0002	P.I. Manufacturing, Inc.	3833		Kitchen sinks		
13-79-0013	C. C. Unson Co., Inc.	3834		Batteries (AB, MCB, IB, SLA)		
13-80-0063	Eveready Battery Company (Phil.), Inc.	3834		Cylindrical dry cells		
13-79-0014	Data General Phils., Inc.	3836		Power supply		
13-80-0064	Philips Electronics and Lighting, Inc.	3839		Incandescent lamps		
13-80-0070	Honda Philippines, Inc.	3846		Motorcycles		
13-80-0082	NAPOCOR - Maintenance Engineering Center	3960		Repair/fabrication of NPC power plant spare parts		
13-80-0065	3M Phils., Inc.	3909		Tapes		
13-80-0069	RP Chem, Inc.	6170		Chemicals		
13-80-0071	ARMEDIC Philippines, Inc.	6170		Diamicon		
13-80-0073	Marsman and Co., Inc.	6170		Drug		
13-80-0074	Upjohn Inc.	6170		Dalacin C capsules 500 mg		
13-80-0070	Alcon Laboratories (Phil.) Inc.	6170		Maxitrol drops/ointment		
13-79-0015	Trust Chemicals, Inc.	6170		Textile dyes, chemical		
13-80-0076	Sancfi Philippines, Inc.	6170				
				Letterpress/Offset RM		
				Epoxies		
				Oil Based Printing Inks		
				Additives for plastics, water treatment		
				Hotmelt adhesives		
				Solvent blends		
				Petrochemical solvents		
				Tires		
				Plastic crates		
				Transparent sheetings		
				Glass containers (bottles)		
				Glass mold		
				Glass bulbs		
				Steel bars		
				Grinding balls		
				BI pipes		
				Deformed bars (reinforcement)		
				Bags and shoes accessories		
				Rings for ladies bags, school and travelling bags		
				PNS-275 (G-40)		
				Metal		
				Crown caps		
				Integrated circuits		
				Printed circuit board		
				Semiconductors		
				Plastic packages		
				14/16L D Dip integrated circuit		
				Integrated circuits		
				Integrated circuits		
				Integrated circuits		
				Axial diodes		
				Karaoke		
				Colored television		
				Kitchen sinks		
				Batteries (AB, MCB, IB, SLA)		
				Cylindrical dry cells		
				Power supply		
				Incandescent lamps		
				Motorcycles		
				Repair/fabrication of NPC power plant spare parts		
				Tapes		
				Chemicals		
				Diamicon		
				Drug		
				Dalacin C capsules 500 mg		
				Maxitrol drops/ointment		
				Textile dyes, chemical		
				Letterpress/Offset RM		
				Epoxies		
				Oil Based Printing Inks		
				Additives for plastics, water treatment		
				Hotmelt adhesives		
				Solvent blends		
				Petrochemical solvents		
				Tires		
				Plastic crates		
				Transparent sheetings		
				Glass containers (bottles)		
				Glass mold		
				Glass bulbs		
				Steel bars		
				Grinding balls		
				BI pipes		
				Deformed bars (reinforcement)		
				Bags and shoes accessories		
				Rings for ladies bags, school and travelling bags		
				PNS-275 (G-40)		
				Metal		
				Crown caps		
				Integrated circuits		
				Printed circuit board		
				Semiconductors		
				Plastic packages		
				14/16L D Dip integrated circuit		
				Integrated circuits		
				Integrated circuits		
				Integrated circuits		
				Axial diodes		
				Karaoke		
				Colored television		
				Kitchen sinks		
				Batteries (AB, MCB, IB, SLA)		
				Cylindrical dry cells		
				Power supply		
				Incandescent lamps		
				Motorcycles		
				Repair/fabrication of NPC power plant spare parts		
				Tapes		
				Chemicals		
				Diamicon		
				Drug		
				Dalacin C capsules 500 mg		
				Maxitrol drops/ointment		
				Textile dyes, chemical		
				Letterpress/Offset RM		
				Epoxies		
				Oil Based Printing Inks		
				Additives for plastics, water treatment		
				Hotmelt adhesives		
				Solvent blends		
				Petrochemical solvents		
				Tires		
				Plastic crates		
				Transparent sheetings		
				Glass containers (bottles)		
				Glass mold		
				Glass bulbs		
				Steel bars		
				Grinding balls		
				BI pipes		
				Deformed bars (reinforcement)		
				Bags and shoes accessories		
				Rings for ladies bags, school and travelling bags		
				PNS-275 (G-40)		
				Metal		
				Crown caps		
				Integrated circuits		
				Printed circuit board		
				Semiconductors		
				Plastic packages		
				14/16L D Dip integrated circuit		
				Integrated circuits		
				Integrated circuits		
				Integrated circuits		
				Axial diodes		
				Karaoke		
				Colored television		
				Kitchen sinks		
				Batteries (AB, MCB, IB, SLA)		
				Cylindrical dry cells		
				Power supply		
				Incandescent lamps		
				Motorcycles		
				Repair/fabrication of NPC power plant spare parts		
				Tapes		
				Chemicals		
				Diamicon		
				Drug		
				Dalacin C capsules 500 mg		
				Maxitrol drops/ointment		
				Textile dyes, chemical		
				Letterpress/Offset RM		
				Epoxies		
				Oil Based Printing Inks		
				Additives for plastics, water treatment		
				Hotmelt adhesives		
				Solvent blends		
				Petrochemical solvents		
				Tires		
				Plastic crates		
				Transparent sheetings		
				Glass containers (bottles)		
				Glass mold		
				Glass bulbs		
				Steel bars		
				Grinding balls		
				BI pipes		
				Deformed bars (reinforcement)		
				Bags and shoes accessories		
				Rings for ladies bags, school and travelling bags		
				PNS-275 (G-40)		
				Metal		
				Crown caps		
				Integrated circuits		
				Printed circuit board		
				Semiconductors		
				Plastic packages		
				14/16L D Dip integrated circuit		
				Integrated circuits		
				Integrated circuits		
				Integrated circuits		
				Axial diodes		
				Karaoke		
				Colored television		
				Kitchen sinks		
				Batteries (AB, MCB, IB, SLA)		
				Cylindrical dry cells		
				Power supply		
				Incandescent lamps		
				Motorcycles		
				Repair/fabrication of NPC power plant spare parts		
				Tapes		
				Chemicals		
				Diamicon		
				Drug		
				Dalacin C capsules 500 mg		
				Maxitrol drops/ointment		
				Textile dyes, chemical		
				Letterpress/Offset RM		
				Epoxies		
				Oil Based Printing Inks		
				Additives for plastics, water treatment		
				Hotmelt adhesives		
				Solvent blends		
				Petrochemical solvents		
				Tires		
				Plastic crates		
				Transparent sheetings		
				Glass containers (bottles)		
				Glass mold		
				Glass bulbs		
				Steel bars		
				Grinding balls		
				BI pipes		
				Deformed bars (reinforcement)		
				Bags and shoes accessories		
				Rings for ladies bags, school and travelling bags		
				PNS-275 (G-40)		
				Metal		
				Crown caps		
				Integrated circuits		
				Printed circuit board		
				Semiconductors		
				Plastic packages		
				14/16L D Dip integrated circuit		
				Integrated circuits		
				Integrated circuits		
				Integrated circuits		
				Axial diodes		
				Karaoke		
				Colored television		
				Kitchen sinks		
				Batteries (AB, MCB, IB, SLA)		
				Cylindrical dry cells		
				Power supply		
				Incandescent lamps		
				Motorcycles		
				Repair/fabrication of NPC power plant spare parts		
				Tapes		
				Chemicals		

GENERAL DESCRIPTION OF BUSINESS/OPERATIONS AND MAJOR PRODUCTS

INST_ID	INSTNAME	PSIC1	PSIC2	MPRODUCT1	MPRODUCT2	MPRODUCT3
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170		Sisovon Elzir 50 and 120 mL	Mucosolvan liquids and other forms	Furoxone liquid and tablet
13-80-0068	G. D. Searle Philippines, Inc.	6170		Isoprin tablet	Lomolil tablet	Cytotec tablet
13-80-0067	Wellcome Philippines, Inc.	6170		Zovirax	Septin	Calpol
13-80-0066	Elian Pharma Phils., Inc.	6170		Nifedipine; Diltiazem; Verelan	Theolan	Durandol
13-80-0072	Schering Philippine Corporation	6170		Oruvall/Orudis	Peflazine	Maalox
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.	7132		Shipping services		
13-77-0011	PNOC Shipping and Transport Corporation	9730				
13-80-0005	Great Effect Enterprises Inc.	9730				
13-80-0010	Easy Grow Industries, Inc.	9730				

Table 8.3 Waste Generation per Year

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-77-0010	SNC-SMP-Farida Packaging Products (Mia. Glass)	3620	Plating wastes	A101	600.00	LI	D	L
13-79-0012	Labtech Manufacturing Industries	3825	Wastewater from electroplating	A101	9,218.97	CUM	D	D
13-79-0012	Labtech Manufacturing Industries	3825	Used flash/solvent solution	A101	108.00	LI	D	D
13-79-0012	Labtech Manufacturing Industries	3825	Used demarking solution	A101	108.00	LI	D	D
13-79-0012	Labtech Manufacturing Industries	3825	TL105- for stripping of diodes	A101	2.40	CUM	D	B
13-79-0012	Labtech Manufacturing Industries	3825	Cyanide solution	A103	1.00	KGS	F	H
13-79-0012	Labtech Manufacturing Industries	3825	Sudge from electroplating process	A199	252.00	KGS	D	H
13-79-0012	Labtech Manufacturing Industries	3825	Gold potassium cyanide	A199	1.00	KGS	L	H
13-80-0004	Epic Electronics Industries Corporation	3825	Sulfuric acid	B201	543.00	KGS	T	H, D
13-78-0002	P.I. Manufacturing, Inc.	3833	Sulfuric acid	B201	2,000.00	KGS	D	I
13-78-0006	Mayer Steel Pipe Corporation	3712	Sulfuric acid	B201	0.60	T	D	D
13-79-0005	Consolidated Industrial Gases, Inc.-Baintawa	3511	Sulfuric acid with chromic sulfate	B201	2.50	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Sulfuric Acid, AR	B201	1.50	LI	T	I
13-80-0033	BOIE Incorporated	3522	Sulfuric acid	B201	1,900.00	LI	C	B
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Acids	B201	240.00	LI	D	B
13-80-0043	Interphil Laboratories, Inc.	3522	Sulfuric acid wastes	B201	233,392.00	LI	C	S
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523	Sulfuric acid	B201	9.20	KGS	T	H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Sulfuric acid	B201	155.00	CUM	N	H
13-80-0055	Philips Semiconductor Phils., Inc.	3825	Acids (B201-B204)	B201	3,888.14	CUM	T	H
13-80-0060	Anker/Aram Philipinas, Inc.	3825	Sulfuric acid	B201	989.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Sulfuric acid	B202	2,065.75	LI	D	H
13-79-0014	Data General Phils., Inc.	3511	Spent acid solution (from chrome plating process)	B202	360.00	LI	C	D
13-80-0012	Union Ajinomoto, Inc.	3511	Weak hydrochloric acid from water treatment (regeneration)	B202	36,200.00	G		D
13-80-0017	Polyphosphates, Inc.	3513	Acid wastewater	B202	6,000.00	LI		D
13-80-0022	EM-POL Corporation	3522	Hydrochloric acid	B202	6.01	LI	D	B
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Hydrochloric acid wastes	B202	384.00	LI	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Hydrochloric acid	B202	16.66	KGS	D	H
13-80-0043	Interphil Laboratories, Inc.	3523	Hydrochloric acid	B202	687.79	T	T	H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3825	Hydrochloric acid	B202	0.12	T	D	H
13-80-0060	Anker/Aram Philipinas, Inc.	3825	Nickel wet	B202	3,650.00	KGS	L	H, W
13-80-0083	Allegra Microsystems Phils., Inc.	3825	Hydrochloric acid	B202	17.50	LI	T	H
13-80-0084	Epic Electronics Industries Corporation	3825	Hydrochloric acid	B203	384.00	LI	D	B
13-80-0033	BOIE Incorporated	3522	Nitric acid wastes	B203	1.88	KGS	D	H
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Nitric acid	B203	33.70	CUM	T	H
13-80-0043	Interphil Laboratories, Inc.	3825	Nitric acid	B203	280.00	KGS	L	H
13-80-0060	Anker/Aram Philipinas, Inc.	3825	Nitric acid	B204	0.60	T	D	D
13-80-0084	Epic Electronics Industries Corporation	3511	Phosphoric acid with chromic sulfate	B204	2.50	LI	D	I
13-79-0005	Consolidated Industrial Gases, Inc.-Baintawa	3514	Phosphoric Acid, AR	B204	96.00	LI	D	B
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3522	Phosphoric acid wastes	B204	0.92	KGS	D	H
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Phosphoric acid	B205	4.80	LI	D	B
13-80-0043	Interphil Laboratories, Inc.	3522	Hydrofluoric acid	B205	0.49	KGS	D	H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Hydrofluoric acid	B205	8,000.00	LI	D	H
13-80-0064	Philips Electronics and Lighting, Inc.	3514	Boric Acid, AR	B207	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Sulfamic Acid, AR	B207	1.00	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3124	Schiff reagent solution	B207	3.00	KGS	B	I
13-80-0025	Wrigley Philippines, Inc.	3522	Hydrophosphorous acid	B207	15.60	LI	D	B
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.							
13-80-0040	Abbot Laboratories (Philippines)							

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Boric, molybdic, sulfamic, perchloric acids and hydrogen sul	B207	450.00	GRM	T	H
13-80-0060	Ankor/Anam Pilipinas, Inc.	3825	Other inorganic acids	B207	9.75	CUM	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Boric acid	B207	58.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Sulfamic acid	B207		KGS	L	H
13-77-0006	Procter and Gamble Philippines, Inc.	3523	Electrostatic precipitator (ESP) acid	B208	350.00	T	D	W
13-77-0006	Procter and Gamble Philippines, Inc.	3523	Off-quality acid	B208	150.00	T	D	W
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Acetic Acid, AR	B208	2.50	LI	D	I
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Valproic acid	B208	0.80	LI	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Benzonic acid	B208	3.00	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Organic acids	B208	96.00	LI	D	B
13-80-0043	Interphl Laboratories, Inc.	3523	Acetic, benzoic and thioglycolic acids	B208	1.45	KGS	T	H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3825	Organic acids	B208	62.06	CUM	T	H
13-80-0060	Ankor/Anam Pilipinas, Inc.	6170	Organic acids	B208	350.00	LI	D	I
13-80-0074	Upjohn Inc.	3825	Alpha flux 260 HF	B208	0.33	LI	D	H, W
13-80-0083	Allegro Microsystems Phils., Inc.	3522	Glacial acetic acid/perchloric acid	B299	43.00	LI	T	H
13-80-0036	BOIE Incorporated	3522	Acids	B299		LI	O	D
13-80-0041	United Laboratories, Inc.	3522	Mixed chemicals, solvents, acids, alkali, etc.	B299	500.00	LI	B	D
13-80-0043	Interphl Laboratories, Inc.	3522	Other mixed acids	B299	192.00	LI	D	B
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523	Spent acid	B299	60,000.00	LI	T	S
13-80-0056	Pacific Semiconductors, Inc.	3825	Other mixed acids	B299	8,000,000.00	G	T	H
13-80-0059	AMI (Philippines), Inc.	3825	Other mixed acids (Diverlite, H2SO4, HNO3, plating rinses)	B299	2,000,000.00	LI	T	H
13-80-0060	Ankor/Anam Pilipinas, Inc.	3825	Other mixed acids	B299	469.86	CUM	T	H
13-80-0074	Upjohn Inc.	6170	Mixed acids	B299	300.00	LI	D	I
13-80-0082	NAPOCOR - Maintenance Engineering Center	3860	Waste acid containing high concentrations of Pb, Cr, Fe, Ni,	B299	182.70	LI	F	H
13-80-0083	Allegro Microsystems Phils., Inc.	3825	Brite dip (mix acid)	B299	0.88	T	D	H, W
13-80-0084	Epic Electronics Industries Corporation	3825	Merox 717 acid cleaner	B299	633.00	LI	L	H
13-77-0001	La Tondaria Distillers, Inc.	3131	0.1% caustic soda	C301	37,440.00	T	O	L
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134	Liquid caustic soda	C301	155.00	CUM	L	L
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	Alkali solution (caustic soda sol'n)	C301	30,000.00	LI	L	L
13-78-0006	Mayer Steel Pipe Corporation	3712	Caustic soda	C301	100.00	KGS	D	L
13-79-0014	Data General Phils., Inc.	3836	Caustic soda	C301	2,085.75	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Sodium Hydroxide, AR	C301	2.00	KGS	D	I
13-80-0017	Polyphosphates, Inc.	3511	Weak caustic soda from water treatment regeneration	C301	2,700.00	G	T	H
13-80-0020	Borden International Philippines, Inc.	3515	Spent 1% caustic soda kettle washings (after several times o	C301	72.00	T	T	D
13-80-0022	EM-POL Corporation	3513	Alkali wastewater	C301	2,000.00	LI	C, P	B
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Alkalies	C301	920.00	LI	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Sodium hydroxide pellets	C301	1.20	KGS	D	B
13-80-0043	Interphl Laboratories, Inc.	3523	Caustic soda	C301	288.00	LI	D	B
13-80-0047	Johnson and Johnson (Philippines), Inc.	3825	Caustic soda	C301	0.70	KGS	N	H
13-80-0055	Philips Semiconductor Phils., Inc.	3825	Caustic soda	C301	87.00	CUM	T	H
13-80-0060	Ankor/Anam Pilipinas, Inc.	3825	Caustic soda	C301	107.83	CUM	T	H
13-80-0084	Epic Electronics Industries Corporation	3825	Caustic soda flakes	C301	225.00	KGS	L	H
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Potassium Hydroxide, AR	C302	4.00	KGS	D	I
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Potash	C302	240.00	LI	D	B
13-80-0043	Interphl Laboratories, Inc.	3522	Potash	C302	2.08	CUM	T	H
13-80-0060	Ankor/Anam Pilipinas, Inc.	3825	Alkaline cleaners	C303	242.00	KGS	T	H, D
13-78-0002	P. I. Manufacturing, Inc.	3833	Spent lye	C303	36,000.00	LI	L	F, W
13-79-0008	Manufacturing Services and Trade Corporation	3825	Ajax cleanser	C303	10.00	KGS	L	D
13-80-0084	Epic Electronics Industries Corporation	3825		C304				

EMB Hazardous Waste Tracking Database

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0043	Interphil Laboratories, Inc.	3522	Ammonium hydroxide	C304	336.00	LI	D	B
13-80-0060	Amkor/Anam Philippines, Inc.	3925	Ammonium hydroxide	C304	0.02	CUM	T	H
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134	Lime slurry	C305	52.00	CUM	T	
13-78-0006	Mayer Steel Pipe Corporation	3712	Lime	C305	100.00	KGS		
13-79-0011	Consolidated Industrial Gases, Inc.-Baintawa	3511	Carbide sludge	C305	1,110.00	T	L	A
13-80-0018	Sime Darby Pilgrims, Inc.	3551	Lime sludge	C305	28,800.00	G	T	A, V
13-80-0047	Superior Gas and Equipment Co., Inc. (SUGECO)	3523	Carbide residue	C305	175,244.00	KGS	L	+
13-78-0002	Johnson and Johnson (Philippines), Inc.	3933	Calcium hydroxide	C305	0.20	KGS	T	H
13-80-0007	P.I. Manufacturing, Inc.	3222	Metal sludges (iron and nickel)	C306	0.43	KGS	T	H, D
13-80-0055	Philips Semiconductor Phils., Inc.	3825	Sludge waste	C306	58,909.10	CUM	P	D, +
13-80-0056	Pacific Semiconductors, Inc.	3825	Heavy metal sludges	C306	35.00	CUM	P	I, I
13-80-0057	Motorola Philippines, Inc.	3825	Lime-neutralized metal sludges	C306		T	Q	W
13-80-0061	Automated Microelectronics, Inc.	3825	Metal sludges	C306	89.70	CUM	Q	
13-80-0083	Allegra Microsystems Phils., Inc.	3825	Heavy metal sludge	C306	4.00	CUM	T	
13-80-0083	Allegra Microsystems Phils., Inc.	3825	Solder dross (tin/lead)	C306	0.04	T	D	O
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3825	Copper	C306	0.04	T	D	O
13-79-0001	Purefoods Corporation	3111	Alkali solution	C399	1,095.00	CUM		U, H
13-79-0012	Labtech Manufacturing Industries	3825	Wastewater from laboratory analysis	C399	360.00	LI	D	B
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Used propanol/sodium hydroxide mixture	C399	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Calcium Chloride, AR	C399	0.50	KGS	D	I
13-80-0025	Wrigley Philippines, Inc.	3124	Sodium Carbonate, AR	C399	24.00	KGS	S	I
13-80-0036	Merck, Inc.	3522	Fehling's solutions (A&B), NaOH + methanol	C399			O	
13-80-0038	Astra Pharmaceuticals (Philis.), Inc.	3522	Alkali	C399				
13-80-0041	United Laboratories, Inc.	3522	Other alkaline materials	C399	1,202.00	GRM		H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3823	Slag	C399	3,643.25	T	D	D
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3812	Dust	C399	98.32	T	D	D
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3812	Alkaline materials	C399	500.00	LI	D	I
13-80-0074	Upjohn Inc.	6170	Sodium carbonate	C399	80.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Mixed indicator 5	D401	0.25	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Manganese II Sulfate, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Iodine, Sublimed, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Bromocresol Green	D401	0.01	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	KCI & AgCl Solution	D401	0.25	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Ferrous Sulfate, AR	D401	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Phenolphthalein	D401	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Magnesium Chloride, AR	D401	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Sodium Fluoride, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Potassium Thiocyanate	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Silver Sulfate, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Buffer Solution (pH 7, 4 & 10)	D401	3.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Ferron Solution	D401	0.20	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Diethylene Glycol, AR	D401	15.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Sodium Thiosulfate, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Potassium Dichromate, AR	D401	0.50	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Potassium Iodide, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Magnesium Sulfate, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Ferric Chloride, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Potassium Nitrate, AR	D401	0.10	KGS	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Ferrous Ammonium Sulfate	D401	0.50	KGS	D	I

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0012	Union Ajinomoto, Inc.	3511	DECA sludge (formed during sepn of Ca content from molasses)	D401	1,650.00	T	T	D
13-80-0014	Resins, Inc.	3511	Calcium sulfate/sulfite	D401	200.00	T	T	D
13-80-0038	Asira Pharmaceuticals (Philis.), Inc.	3522	Salts	D401	3.00	KGS	G	B
13-80-0040	Abbott Laboratories (Philippines)	3522	Ammonium chloride	D401	1.50	KGS	D	D
13-80-0040	Abbott Laboratories (Philippines)	3522	Ferrous sulfate dried	D401	174.00	KGS	D	B
13-80-0040	Abbott Laboratories (Philippines)	3522	Iron sulfate USP granules	D401	12.00	KGS	D	B
13-80-0040	Abbott Laboratories (Philippines)	3522	Iron sulfate dried	D401	12.00	KGS	D	B
13-80-0060	Amkor/Anam Pilipinas, Inc.	3825	Non-toxic salts	D401	18.48	CUM	T	H
13-80-0063	Eveready Battery Company (Philis.), Inc.	3834	Non-toxic salts (ZnCl2 solution, NH4Cl powder)	D401	8.72	T	D	D
13-80-0074	Ugjohn Inc.	6170	Non-toxic salts	D401	200.00	KGS	D	I, D
13-80-0086	Honda Philippines, Inc.	3846	Phosphating line sludges	D401	2.00	T	D	D
13-80-0077	Polyphosphates, Inc.	3511	Arsenic sludge - mixture of As2S3 ppt., filler aid & H3PO4	D402	0.80	T	D	D
13-80-0038	Asira Pharmaceuticals (Philis.), Inc.	3522	Arsenic (III) oxide	D402	3.00	GRM	GRM	D
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523		D404	5.00	KGS		D
13-80-0038	Asira Pharmaceuticals (Philis.), Inc.	3522	Cadmium	D404	390.00	T		D
13-80-0063	Eveready Battery Company (Philis.), Inc.	3834	EAF dust	D404	48.00	T		S
13-80-0080	GST Philippines, Inc.	3712	Refractory bricks	D405	1,041.00	T		D
13-80-0080	GST Philippines, Inc.	3712	Mill scale	D405	4,860.00	T		D
13-80-0080	GST Philippines, Inc.	3712	EAF slag	D406	1,200.00	G	T	W
13-80-0080	SMC-SMPP-Farola Packaging Products (Ma. Glass)	3820	Inorganic chemical waste (ceramic paints)	D406	1,197.00	T	D	W
13-77-0010	C. C. Unson Co., Inc.	3834	Lead drosses/scrap plates	D406	3.00	T	D	W
13-79-0013	Unilox Industrial Corporation	3511	Lead dross	D406	150.00	KGS	P	W
13-80-0013	Unilox Industrial Corporation	3511	Lead salts/scrap powder spillage and contaminated w/ dust/rej	D406	80.00	LI	C	D
13-80-0013	Unilox Industrial Corporation	3511	Dissolved lead salts from chemical analysis of the product	D406	32.00	GRM		
13-80-0047	Johnson and Johnson (Philippines), Inc.	3522	Lead acetate and lead oxide yellow	D406	5.00	KGS		
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Welding rod	D406	9.52	T	D	D
13-80-0058	Zilog Philippines, Inc.	3825	Sludge (with levels of Pb)	D406	2.05	CUM	D	D
13-80-0059	AMI (Philippines), Inc.	3825	Lime-neutralized metal sludge (with high levels of Pb)	D406	0.05	T	D	D
13-80-0060	Amkor/Anam Pilipinas, Inc.	3834	Lead compounds	D406	38,110.00	LI	L	A
13-80-0063	Eveready Battery Company (Philis.), Inc.	3834	Lead	D406	50.00	KGS	L	H
13-80-0080	GST Philippines, Inc.	3712	WTP sludge	D406	0.10	KGS	D	I
13-80-0084	Epic Electronics Industries Corporation	3825	Lead (Bi-4) 250%	D406	30.00	GRM		
13-80-0084	Epic Electronics Industries Corporation	3825	Pb-Ni nickel brightener	D407	0.01	T	D	D
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Mercuric Sulfate, AR	D407	10.00	LI	B	A+
13-80-0038	Asira Pharmaceuticals (Philis.), Inc.	3522	Mercury (II) chloride and mercury (II) oxide yellow	D407	16.00	T	D	I
13-80-0047	Johnson and Johnson (Philippines), Inc.	3834	Mercury/mercuric chloride	D407	200.00	KGS	D	I
13-80-0063	Eveready Battery Company (Philis.), Inc.	3839	Mercury	D499	750.00	KGS	O	
13-80-0064	Philips Electronics and Lighting, Inc.	3812	Sludge bed cake	D499	9.00	KGS	D	D
13-78-0005	Padoson Stainless Steel Corporation	3712	Zinc ammonium chloride	D499	0.81	KGS	D	B
13-78-0006	Mayer Steel Pipe Corporation	3712	Aluminum sulphate	D499	0.03	KGS	D	B
13-78-0006	Mayer Steel Pipe Corporation	3522	Inorganic chemicals	D499	524,870.00	LI	T	I
13-80-0036	Merck, Inc.	3522	Selenium sulfide micronized	D499	50.75	CUM	T	H
13-80-0038	Asira Pharmaceuticals (Philis.), Inc.	3522	Potassium metabisulfite	D499	300.00	KGS	D	I, D
13-80-0040	Abbott Laboratories (Philippines)	3522	Cupric chloride USP	D499				
13-80-0040	Abbott Laboratories (Philippines)	3522	Sodium sulfite	D499				
13-80-0046	Colgate-Palmolive (Philippines), Inc.	3825	Other salts and complexes	D499				
13-80-0060	Amkor/Anam Pilipinas, Inc.	6170	Other salts and complexes	D499				
13-80-0074	Ugjohn Inc.							

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0084	Epic Electronics Industries Corporation	3825	Nickel carbonate	D499		KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Sn (BF4) 250%	D499	209.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Nickel sulfate	D499	17.00	LBS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Ni-brightener (NI-835, 625, 720)	D499	9.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Nickel chloride	D499	50.00	LBS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Ammonium bicarbonate	D499	2,750.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Sodium chloride	D499	2,292.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Ammonium bi-fluoride	D499	1,175.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Peptone	D499	41.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Nickel sulfamate	D499	22.00	LBS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Copper anodes	D499	3,190.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Thiourea	D499	25.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Copper brightener AC-FB	D499	20.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Activated carbon	D499	270.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Butyl cellosolve	D499	1,200.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Industrial salt	D499	617.00	LBS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Copper sulfate	D499	958.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Ammonium persulfate	D499	865.00	G	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Heavy copper	D499	5.00	L	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Formalin	D501	700.00	KGS	D	I
13-80-0084	Epic Electronics Industries Corporation	3825	Personal care preparations containing hydrogen peroxide	D501	900.00	LI	C, P	B
13-80-0084	Epic Electronics Industries Corporation	3825	Reactive chemicals	D501				
13-80-0084	Epic Electronics Industries Corporation	3825	Oxidizing agents (hydrogen peroxide, iodine, potassium perma	D501	4.68	KGS	T	H
13-80-0084	Epic Electronics Industries Corporation	3825	Oxidizing agents	D501	6.86	CUM	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Hydrogen peroxide	D501	1,530.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Sodium hydroxide	D501	1,075.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Calcium hydroxide	D501	3,240.00	KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Ammonium hydroxide	D502				
13-80-0084	Epic Electronics Industries Corporation	3825	Reducing agents (ammonium oxalate, disodium oxalate, hydraz	D502	75.00	GRM		
13-80-0084	Epic Electronics Industries Corporation	3825	Explosives and unstable chemicals (benzoyl peroxide, 2,4-din	D503	137.00	GRM	O	
13-80-0084	Epic Electronics Industries Corporation	3825	Reactive chemicals	D599	300.00	KGS		
13-80-0084	Epic Electronics Industries Corporation	3825	Electrostatic precipitator waste	D599	70,876.00	LI	T	I
13-80-0084	Epic Electronics Industries Corporation	3825	Highly reactive chemicals (bromine)	D599	15.00	GRM	D	D
13-80-0084	Epic Electronics Industries Corporation	3825	Phosphorus sludge	D599	10.00	T		
13-80-0084	Epic Electronics Industries Corporation	3825	Acrylic paint, PVA washings	E601	3,040.00	LI	T	I, D
13-80-0084	Epic Electronics Industries Corporation	3825	Resinous sludges (aqueous-based)	E601	10,500.00	LI	T	I, D
13-80-0084	Epic Electronics Industries Corporation	3825	Kettle washings of the aqueous-based resins	E601	90.00	T	T	I
13-80-0084	Epic Electronics Industries Corporation	3825	Wash thinner	E601	1,260.00	LI	L	I
13-80-0084	Epic Electronics Industries Corporation	3825	Washwater for tanks	E601	182.50	CUM	L	D
13-80-0084	Epic Electronics Industries Corporation	3825	Wastewater	E601	400.00	CUM	T	D
13-80-0084	Epic Electronics Industries Corporation	3825	Polyvinyl alcohol	E601	50.00	KGS	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Washwater from tank washing	E601	1,000.00	T	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Polyvinyl acetate	E601	100.00	KGS	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Dextrine	E601	250.00	KGS	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Latex rinsings	E601	4,800.00	LI	D	O
13-80-0084	Epic Electronics Industries Corporation	3825	Paint/resin sludges (solvent-based)	E602	280.00	LI	D	I

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0014	Resins, Inc.	3511	Resinous sludges (solvent-based)	E602	10,500.00	LI	T	I, D
13-80-0023	Kemwerke, Incorporated	3513	Solvent washings (90% kerosene, 8% mineral spirits, 2% xylol)	E602	15,000.00	LI	D	S
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521	Paint sludge	E602	3,150.00	LI	D	D
13-80-0031	Charter Chemicals and Coating Corporation	3521	Washing solvents	E602	300.00	G	D	D
13-80-0036	Merck, Inc.	3522	Organic solvents	E602		T	D	S, D
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	Waste solvent mixture	E602	8.64	KGS	O	W
13-80-0057	Motorola Philippines, Inc.	3825	Silver epoxy	E602	4.80	G	D	V
13-80-0057	Motorola Philippines, Inc.	3825	Used acetone	E602	676.00	CUM	F	A
13-80-0058	Zilog Philippines, Inc.	3825	Solvents	E602	0.50	CUM	#	#
13-80-0060	Ankor/Avram Philipinas, Inc.	3825	Solvent-based inks	E602	1.60	CUM	D	I
13-80-0065	3M Phils., Inc.	3909	Solvent-based adhesives, resins, paints (wet scrap)	E602	5.67	LI	D	O
13-80-0087	Alpolac, Incorporated	3513	Solvent washings	E602	4,000.00	G	D	T
13-80-0088	Astron Philippines Inc.	3832	Rosin flux	E602	90.00	CUM	D	H
13-77-0003	SMPP - Farola Carton Plant	3412	Ink washings	E699	12.00	LI	L	D
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	Organic sludges	E699	201.00	LI	I	D
13-79-0010	Republic Chemical Industries, Inc.	3529	Polymer combi. of epichlorohydrin, bisphenol A, epoxy resin,	E699	12.00	CUM	D	H
13-80-0008	Packaging Products Corporation	3412	Ink washings	E699	195.00	CUM	D	I
13-80-0021	Polymer Chemicals, Inc.	3513	Used filler aids	E699	19.20	T	D	S
13-80-0027	Nippon Paint Philippines, Inc.	3521	Dirty or wash thinner	E699	30.00	CUM	D	H
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521	Wastewater contaminated with paints, varnishes	E699	6.50	T	D	D
13-80-0033	BASF Coatings and Inks Phils. Inc.	3521	Contaminated rugs (paints, varnishes)	E699	100.00	KGS	D	B
13-80-0039	Sterling Products International, Inc.	3511	Inks	F701		LI	D	W
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3521	Organic solvents	F701	2,450.00	LI	D	I
13-79-0007	Cardinal Industrial, Inc.	3514	Organic solvents (washings)	F701	2.50	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3513	Propanol, AR	F701	2,400.00	LI	D	V
13-80-0023	Kemwerke, Incorporated	3513	Organic solvents	F701	0.45	LI	T	I
13-80-0033	BOIE Incorporated	3522	Hexane	F701	12.00	LI	T	I
13-80-0038	BOIE Incorporated	3522	Ether	F701	120.00	LI	G	I
13-80-0043	Astra Pharmaceuticals (Phils.), Inc.	3522	Organic solvents	F701	150.00	LI	D	I
13-80-0045	Interphill Laboratories, Inc.	3522	Solvents (laboratory)	F701	5.00	LI	D	I
13-80-0047	Pfizer, Inc.	3522	Lab solvents	F701	1.73	KGS	D	I
13-80-0047	Johnson and Johnson (Philippines), Inc.	3819	Organic solvents with flash points >61 oC	F701		LI	D	T
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	Glidsafe UTS-3	F701	1,000.00	LI	D	T
13-80-0055	Philips Semiconductor Phils., Inc.	3825	Organic solvent - flash point 61 degrees C	F701	100.00	LI	D	V
13-80-0087	Alpolac, Incorporated	3521	Organic solvents (washings)	F702	2,450.00	LI	D	I
13-79-0007	Cardinal Industrial, Inc.	3836	Organic solvents	F702	100.00	LI	D	D
13-79-0014	Data General Phils., Inc.	3514	Acetonitrile, AR	F702	5.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Tetrahydrofuran, AR	F702	1.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Methyl Ethyl Ketone, AR	F702	20.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Methanol, AR	F702	15.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Ethanol, AR	F702	10.00	LI	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Acetone, AR	F702	4.00	LI	D	I
13-80-0002	Mead Johnson Philippines, Inc.	3112	Lab. solvents (hexane, chloroform, methanol, petroleum ether	F702	155.00	LI	D	I
13-80-0008	Packaging Products Corporation	3412	Platemaking spent solvent (perchloroethylene, n-butanol)	F702	720.00	LI	D	I
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Solvents (laboratory)	F702		LI	D	D
13-80-0043	Interphill Laboratories, Inc.	3522	Lab solvents	F702	1,000.00	LI	D	D
13-80-0045	Pfizer, Inc.	3522	Organic solvents with flashpoint < 61 oC	F702	98,237.00	GRM	D	I
13-80-0047	Johnson and Johnson (Philippines), Inc.	3819	Bioact EC-7R	F702	800.00	LI	D	T
13-80-0054	Rowell Lithography and Metal Closure, Inc.							
13-80-0055	Philips Semiconductor Phils., Inc.							

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0053	Allegro Microsystems Phils., Inc.	3825	Best chem S-7	F702	0.50	T	D	H, W
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511	Used trichloroethylene (TCE)	F703	25.00	G	D	Y
13-80-0002	Mead Johnson Philippines, Inc.	3112	diethyl ether, toluene, isopropyl alcohol, tetrahydrofuran, etc	F703	25.00	LI	D	I
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Organic solvents	F703	2,161.00	KGS	D	B
13-80-0039	Sterling Products International, Inc.	3522	Lab solvents	F703	200.00	LI	D	D
13-80-0042	Warner Lambert Philippines, Inc.	3522	Chlorinated solvents and residues (CCI4, chlorobenzene, chlo	F703	11.97	KGS	L	H
13-80-0047	Johnson and Johnson (Philippines), Inc.	3825	Ammonium chloride	F703	3,330.00	KGS	L	H
13-80-0064	Epic Electronics Industries Corporation	3825	Ferric chloride	F703		KGS	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Toluene	F704	5.00	LI	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Isopropyl alcohol	F704	35,718.90	G	L	H
13-80-0084	Epic Electronics Industries Corporation	3825	Cattle manure	G801	12.94	T	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Mortalities & by-product of parturition	G801	86,586.00	T	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Hog manure	G801	250.00	T	L	L
13-80-0084	Epic Electronics Industries Corporation	3825	Mortalities and by-product of parturition	G801	0.40	T	D	M
13-80-0084	Epic Electronics Industries Corporation	3825	Degreaser	G802	1,080.00	T	D	D
13-80-0084	Epic Electronics Industries Corporation	3825	Activated sludge	G899	936.00	T	T	O, +
13-80-0084	Epic Electronics Industries Corporation	3825	Spent yeast	G899	126.00	T	T	D
13-80-0084	Epic Electronics Industries Corporation	3825	Spent filter aid	G899	4,680.00	CUM	T	W
13-80-0084	Epic Electronics Industries Corporation	3825	Activated sludge	G899	7,176.00	CUM	T	W
13-80-0084	Epic Electronics Industries Corporation	3825	Scum	G899	182,500,000.00	G	T	B
13-80-0084	Epic Electronics Industries Corporation	3825	Tannery wastes	H901	182,500,000.00	G	T	B
13-80-0084	Epic Electronics Industries Corporation	3825	Other textile wastes	H999	942,545.42	CUM	T	H
13-80-0084	Epic Electronics Industries Corporation	3825	Small and use pumice stone, cotton lint, sludge cake form	H999	65.26	T	S	A
13-80-0084	Epic Electronics Industries Corporation	3825	Textile waste (indigo dye stuff)	H999	350.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Small and use pumice stone, cotton lint	H999	9,000.00	KGS	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oils	I101	2,760.00	KGS	D	A
13-80-0084	Epic Electronics Industries Corporation	3825	Waste lube oil ex-power plant	I101	16,800.00	LI	D	V
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	10.00	T	T	&
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oils	I101	10,080.00	LI	D	O
13-80-0084	Epic Electronics Industries Corporation	3825	Used capella oil	I101	420.00	LI	D	O
13-80-0084	Epic Electronics Industries Corporation	3825	Used motor oil	I101	1,320.00	G	D	A
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	420.00	LI	D	A
13-80-0084	Epic Electronics Industries Corporation	3825	Oils	I101	364.00	LI	D	B, W
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oil	I101	30.00	KGS	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oils	I101	2,400.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Slop oil	I101	60,000.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Used lubricating oil	I101	5,000.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Motor oil	I101	2,000.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oil	I101	1,500.00	KGS	D	V
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	720.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oils, lubricants and thinner mix	I101	0.54	T	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	3,750.00	LI	D	S, W
13-80-0084	Epic Electronics Industries Corporation	3825	Waste oil	I101	12,600.00	LI	D	S
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	676.00	G	D	S, W
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	210.00	LI	D	S, W
13-80-0084	Epic Electronics Industries Corporation	3825	Used oil	I101	400.00	LI	D	S, W
13-80-0084	Epic Electronics Industries Corporation	3825	Spent bleaching earth	I102	362,000.00	KGS	D	D
13-80-0084	Epic Electronics Industries Corporation	3825	Sludge from wastewater treatment plant	I102	270,000.00	KGS	D	D

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-79-0011	Sime Darby Pilipinas, Inc.	3551	Dirty oil	I02	24,000.00	KGS	D	A
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Food process wastewater	I03		KGS	T	B
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523	Oil/water mixtures	I05	5,000 000.00	LI	T	A
13-77-0011	PNOC Shipping and Transport Corporation	7132	Used compressor oil with water	I05	5.00	T	D	S
13-79-0005	Consolidated Industrial Gases, Inc.-Balintawa	3511	Oil/water mixtures/grease/kerosene	I05	2.00	LI	D	I
13-79-0010	Republic Chemical Industries, Inc.	3529	Wastewater contaminated with oil/water mixtures	I05	150.00	CUM	D	H
13-80-0029	BASF Coatings and Inks Phils, Inc.	3521		I05	30.00		D	
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Oil/water mixture (15:1)	I05	75,750.00	LI	L	L
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.	3560	Containers (drums, fiberboard kags, sacks)	J201	37,500.00	KGS	T	
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	7132	Empty paint containers	J201	2.00	T	D	
13-77-0011	PNOC Shipping and Transport Corporation	3521	Containers	J201	200.00	PCS	D	W
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Containers (plastic carboys, 20-liter capacity)	J201	932.00	PCS	T	T
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Containers (plastic carboys, 50-liter capacity)	J201	50.00	PCS	D	S
13-79-0010	Republic Chemical Industries, Inc.	3529	Screw tin cans with epoxy residue	J201	50.00	KGS	J	S
13-79-0010	Republic Chemical Industries, Inc.	3529	Used drums containing residue of EPS cuttings/trimmings/dust	J201	3,028.00	PCS	D	A
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Drums (200 li capacity)	J201	10.40	T	D	D
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Linens, Pouches, Bags	J201	0.70	T	D	I
13-80-0002	Mead Johnson Philippines, Inc.	3112	Broken glass	J201	25.00	KGS	D	I
13-80-0017	Polysphosphates, Inc.	3513	Scrap drums previously containing yellow phosphorus	J201	900.00	T	D	S
13-80-0022	EM-POL Corporation	3514	Empty 50-kg capacity drum containers	J201	48.00	KGS	W	
13-80-0024	Hoechst Philippines, Inc.	3521	Empty drums	J201	12.00	T	T	
13-80-0027	Nippon Paint Philippines, Inc.	3521	Container or packaging materials	J201	111.50	T	D	T, S
13-80-0029	BASF Coatings and Inks Phils, Inc.	3521	Used cans, containers, paperbags	J201	6.50	T	D	D
13-80-0042	Atlantic Coatings, Inc.	3522	Portable containers	J201	300.00	PCS	D	T, H
13-80-0043	Warner Lambert Philippines, Inc.	3522	Broken glasses	J201	30.00	KGS	D	D
13-80-0045	Interphill Laboratories, Inc.	3522	Broken glasses	J201	25.00	KGS	D	I
13-80-0056	Pacific Semiconductors, Inc.	3522	Immediate containers (PE) bags of hazardous chemicals	J201	500.00	KGS	T	I
13-80-0057	Motorola Philippines, Inc.	3525	Portable containers previously containing toxic chemical sub	J201	2,000.00	PCS	D	T
13-79-0010	Republic Chemical Industries, Inc.	3529	Chemical containers	J201	360.00	KGS	P	W
13-79-0010	Republic Chemical Industries, Inc.	3529	EPS cuttings/trimmings/dust	K301	0.78	T	I	A
13-79-0010	Republic Chemical Industries, Inc.	3529	Cured urea formaldehyde	K301	58.00	KGS	O	D
13-79-0010	Republic Chemical Industries, Inc.	3529	Cured silicone sealants	K301	37.00	KGS	J	D
13-79-0010	Republic Chemical Industries, Inc.	3529	Cured SBR	K301	14,400.00	KGS	D	A
13-79-0011	Sime Darby Philippines, Inc.	3551	Carbon black sweepings	K301	0.20	T	D	D
13-80-0020	Borden International Philippines, Inc.	3521	Solidified and polymerized wastes	K301	500.00	KGS	D	D
13-80-0031	Charter Chemicals and Coating Corporation	3521	Solidified and polymerized wastes	K301	400.00	KGS	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Polyvinyl acetate	K301	156.00	T	A	D
13-80-0057	Motorola Philippines, Inc.	3525	Cul runners	K302	12.00	T	T	D
13-80-0012	Union Aluminote, Inc.	3511	Mud blocks (from the prod'n of caustic soda using the Hg pro	L401	3.33	T	D	A
13-77-0012	EXXON Chemical Philippines	3540	Chemical or chemical combination	L401		T	D	A
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	Organic chemicals (mixed with E602, F701, F702)	L402	3.33	T	D	A
13-77-0012	EXXON Chemical Philippines	3540	Chemical or chemical combination	L402	40.00	T	T	B
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Wastewater containing aromatics	L402		GRM	T	H
13-80-0020	Borden International Philippines, Inc.	3515	Phenolics (part also of aqueous-based resins as kettle wash)	L402	436.40			
13-80-0047	Johnson and Johnson (Philippines), Inc.	3819	Aromatics and phenolics	L402				
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3523		L402				
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Diethyl ether	L403	1.79	KGS	T	I
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523	Washings from floor and equipment	L404	960,000.00	KGS	T	D
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Returned drained shampoo/conditioners/facial cleansers	L404	15.00	T	D	S
13-76-0009	Pilipinas Kao, Inc. (Household Division)	3523	Wastewater containing fatty alcohols	L404	50.00	T	T	B

EMB Hazardous Waste Tracking Database

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-79-0008	Pilipinas Kao, Inc. (Household Division)	3523	Washwater containing surfactants	L404	135.00	T	T	B
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Washwater containing shampoos/conditioners/facial & body ole	L404	240.00	T	T	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Ammonium lauryl ether sulfate	L404	24.12	LI	D	B
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Sodium lauryl sulfate	L404	0.05	KGS	B	I
13-80-0025	Wigley Philippines, Inc.	3124	Hydranal composite 5-methanol/foramide/mineral spirits mixt	L499	96.00	KGS	D	&
13-77-0012	EXXON Chemical (Philippines)	3540	Chemical or chemical combination	L499	3.33	T	T	B
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	Washwater containing industrial chemicals	L499	115.00	T	T	B
13-80-0014	Resins, Inc.	3511	Tar from phthalic anhydride plant	L499	21,000.00	LI	D	L,D
13-80-0039	Sterling Products International, Inc.	3522	Organic laboratory chemicals	L499	751.45	KGS	B	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Metronidazole	L499	3.00	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Saccharin sodium	L499	9.00	KGS	B	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Tulobutrol HCl	L499	0.03	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Terazosin mono HCl	L499	0.03	KGS	D	D
13-80-0040	Abbot Laboratories (Philippines)	3522	D-pseudoephedrine HCl	L499	12.00	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Carboxamine maleate NF	L499	1.20	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Magnesium acetate	L499	9.00	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Bufomedil hydrochloride	L499	9.00	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Chlorpheniramine maleate	L499	0.60	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Dopamine HCl	L499	4.50	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Enoxacin sesquihydrate	L499	3.35	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Sodium hydrogen divalproate	L499	0.30	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Lidocaine HCl	L499	0.30	KGS	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Bromhexine HCl	L499	1,073.20	GRM	D	B
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Other organic chemicals	L499	0.25	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Gear oil	L499	0.13	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Brake fluid	L499	0.12	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Grease	L499	0.25	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	ATF oil	L499	0.25	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Hydraulic oil	L499	0.25	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Engine oil from spills	L499	3.00	LI	D	C
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	Solder flux	L499	250.00	LI	F	S,W
13-80-0062	Philips Consumer Products	3832	Organic chemicals	L499	300.00	LI	D	I
13-80-0074	Upjohn Inc.	6170	Genesolv 2004	L499	0.75	T	D	H,W
13-80-0083	Allegro Microsystems Phils., Inc.	3825	Inoculated culture media (eg. agar/broth)	M501	730.00	KGS	D	Z,D
13-79-0001	Purefoods Corporation	3522	Bandages from clinic	M501	10.00	KGS	D	I
13-77-0004	The Shell Chemical Co. (Philippines), Inc.	3511	Asbestos waste	M502	1.44	KGS	D	D
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	Tablets/capsules (methylolopa, dexanethasone, hydrochlorothia	M503	3.90	KGS	D	D
13-77-0005	YSS Laboratories Company, Inc.	3522	Viols/ampules (phytonadione, dexanethasone sodium phosphate,	M503	5.75	KGS	D	D
13-80-0002	Mead Johnson Philippines, Inc.	3112	Acetaminophen tablets	M503	300.00	KGS	D	D
13-80-0002	Mead Johnson Philippines, Inc.	3112	Flammable personal care preparations	M503	700.00	KGS	D	I
13-80-0002	Mead Johnson Philippines, Inc.	3112	Vitamin preparations	M503	300.00	KGS	D	D,B
13-80-0033	BOIE Incorporated	3522	Assorted expired drug products (tablets, capsules, dry syrup	M503	3.50	KGS	T	T
13-80-0033	BOIE Incorporated	3522	Assorted expired drug products (syrups and suspensions)	M503	7.50	LI	T	D
13-80-0034	Boie-Takeda Chemicals, Inc.	3522	Pharmaceutical wastes and drugs (expired)	M503	5.50	T	Z	D
13-80-0035	Boots Pharmaceuticals (Phils.), Inc.	3522	Pharmaceutical wastes and drugs	M503	1,275.00	KGS	D	I
13-80-0036	Merck, Inc.	3522	Pharma drugs	M503	1.00	T	D	I
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522	Expired pharmaceutical products	M503	1,800.00	KGS	D	I
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	Pharmaceutical wastes	M503	800.00	KGS	D	D,B
13-80-0039	Sterling Products International, Inc.	3522	Pharmaceutical drugs	M503	0.02	LI	D	B
13-80-0040	Abbot Laboratories (Philippines)	3522	Vit. A palmitate USP beads	M503			D	B

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-80-0041	United Laboratories, Inc.	3522	Assorted rejected tablets, capsules, powders, granules	M503	10.00	T	D	D, I
13-80-0041	United Laboratories, Inc.	3522	Expired tablets, capsules	M503	60.00	T	D	M, I
13-80-0042	Warner Lambert Philippines, Inc.	3522	Returns of various ethical products - tablets/capsules	M503	400.00	KGS	D	D
13-80-0043	Interphil Laboratories, Inc.	3522	Pharmaceutical waste (expired products and drugs)	M503	13,000.00	KGS	D	I
13-80-0044	GX International, Inc.	3522	Pharma drugs	M503		KGS	D	I
13-80-0045	Pfizer, Inc.	3522	Rejected materials from plant operations (sodium salicylate)	M503	500.00	KGS	T	I
13-80-0066	Elan Pharma Phils., Inc.	6170	Pharmaceutical wastes and drugs (expired drug products)	M503	1,320.00	KGS	Z	I
13-80-0067	Wellcome Philippines, Inc.	6170	Alkeran, leukeran, myleran, purinethol, imuran tablet and in	M503	11.77	KGS	T	I, B
13-80-0068	G. D. Searle Philippines, Inc.	6170	Pharmaceutical wastes (solid)	M503	289.04	KGS	B	I, D
13-80-0068	G. D. Searle Philippines, Inc.	6170	Pharmaceutical waste (liquid)	M503	94.54	LI	B	I, D
13-80-0069	RP Chem. Inc.	6170	Pharmaceutical wastes	M503	8,823.00	KGS	D	I, B
13-80-0070	Alcon Laboratories (Phil.) Inc.	6170	Expired pharmaceutical drugs, raw and packaging materials	M503	500.00	CUM	Z	L
13-80-0071	ARMEDIC Philippines, Inc.	6170	Pharmaceutical waste	M503	800.00	KGS		L, L
13-80-0072	Schering Philippine Corporation	6170	Pharmaceutical waste	M503	150.00	KGS	D	
13-80-0073	Marsman and Co., Inc.	6170	Pharmaceutical wastes	M503	31.00	KGS	D	
13-80-0074	Upjohn Inc.	6170	Antibiotics, steroids, cytotoxics, benzodiazepines, analgesics	M503	600.00	KGS	D	H, I
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170	Expired finished pharmaceutical drugs	M503	508.00	KGS	O	I, D
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170	Expired raw materials	M503	200.00	KGS	D	D, I
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170	Packaging materials (carton, labels)	M503		KGS	D	I
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	Off-specification/redundant pesticides	M504		T	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Contaminated Sawdust	M504	0.70	T	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Slurry from Evaporation Pond	M504	0.70	T	D	I
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	Obsolete/Returned Products	M504	0.70	T	D	I
13-80-0024	Hoechst Philippines, Inc.	3514	Plastic and paper bags	M504	3.00	T	D	I
13-80-0024	Hoechst Philippines, Inc.	3514	Sawdust with spillages and washings	M504	3.00	T	D	I
13-80-0024	Hoechst Philippines, Inc.	3514	Fungicide dusts	M504		T	D	
13-80-0024	Hoechst Philippines, Inc.	3514	Activated carbon sludges	M504		T	D	
13-80-0024	Hoechst Philippines, Inc.	3514	Mills scale	M504	180.00	T	T	D
13-78-0007	Continental Steel Manufacturing Corporation	3825	Gate flashers from molding	M650	34.27	KGS	D	D
13-80-0088	Astron Philippines Inc.	3832	Solder bar/metal alloy	M650	480.00	KGS	C	W
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.	6170	Nitrol (nitroglycerine)	N258	250.00	KGS	D	L
13-80-0033	BOIE Incorporated	3522	Acetone	N510	32.00	LI	T	
13-80-0033	BOIE Incorporated	3522	Benzene	N540	0.50	LI	T	
13-80-0033	BOIE Incorporated	3522	Chloroform	N805	40.00	LI	T	
13-80-0033	BOIE Incorporated	3522	Methanol	N807	36.00	LI	T	
13-80-0033	BOIE Incorporated	3522	Pyridine	N921	4.50	LI	T	
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy	3511	Used trichloroethylene	N975	120.00	LI	D	Y
13-80-0055	Philips Semiconductor Phils., Inc.	3825	Trichloroethylene	N975		LI	D	S, W
13-80-0024	Hoechst Philippines, Inc.	3514	Expired emulsion concentrates with xylene as solvent	N995	1,200.00	LI		
13-77-0009	SMC - Mold Manufacturing Plant	3117						
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.							
13-78-0008	Cleveland Textile Mills, Inc.							
13-78-0008	Cleveland Textile Mills, Inc.							
13-78-0011	Polyglass International Manufacturing Corp.							
13-78-0011	Polyglass International Manufacturing Corp.							
13-78-0011	Polyglass International Manufacturing Corp.							
13-78-0011	Polyglass International Manufacturing Corp.							
13-78-0012	FEJEA Enterprises							
13-78-0016	Metal Plus Industries	3720	Diluted HCl		1,200.00	LI	C	D
13-78-0016	Metal Plus Industries	3720	Plating wastes		100.00	KGS	D	
13-78-0016	Metal Plus Industries	3720	Diluted chromium compounds		20.00	KGS	D	

EMB Hazardous Waste Tracking Database

WASTE GENERATION PER YEAR

INST_ID	INSTNAME	PSIC1	WS_NAME	WS_NUMBER	WS_VOLUME	WS_UNITS	WS_STORE	WS_METHOD
13-78-0016	Metal Plus Industries	3720	Diluted Sulfuric Acid		30.00	LI	D	D
13-78-0016	Metal Plus Industries	3720	Caustic Soda		10.00	KGS	H	U
13-78-0017	Fastbrite Industrial Plating Corp.		Acid and base neutralization product				J	
13-78-0017	Fastbrite Industrial Plating Corp.	3720	Zinc phosphate sludge		120.00	KGS	J	B
13-78-0019	Luxury Metal Manufacturing Corp.	3720	Plating waste		120.00	G	D	
13-78-0019	Luxury Metal Manufacturing Corp.	3720	Acid waste		100.00	G	D	
13-78-0019	Luxury Metal Manufacturing Corp.	3720	Alkali waste		5.00	T	F	H
13-78-0020	Dyson Surface Coating Corp.		Phosphoric		6.00	T	F	H
13-78-0020	Dyson Surface Coating Corp.		Alkaline cleaners		15.00	T	F	H
13-78-0020	Dyson Surface Coating Corp.		Mixture of HCl and H2SO4		200.00	LI	F	H
13-78-0022	Geltech Electroplating		Washings containing nickel and copper		300.00	KGS	H	I
13-78-0023	Polymedic General Hospital		Pathological wastes		18.00	T	D	
13-78-0024	Signal Electric Ind. Inc.		Metal sludges					
13-79-0003	SYSU International, Inc.	3129						
13-79-0004	Qualitech Chemical Corp.	3511						
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3521						
13-79-0015	Trust Chemicals, Inc.	6170						
13-79-0017	Twin Aces Industries, Inc.	3521	Paints		0.70	T	D	D
13-79-0018	Kolora Ink and Chemical Corporation	3529	Inks solvent based				D	D
13-79-0018	Kolora Ink and Chemical Corporation	3529	Other mixed				D	D
13-79-0019	Paron Trading		Sulfuric acid					H
13-79-0019	Paron Trading		Caustic soda					H
13-79-0019	Paron Trading		Nitric acid					H
13-79-0021	Union Refinery Corp.	2221	Acid wastes		3.00	T	D	D
13-79-0021	Union Refinery Corp.	2221	Oil sludge		0.50	T	D	D
13-79-0021	Union Refinery Corp.	2221	Oil/water mixture		2.40	CUM	T	D
13-79-0022	MKK Steel Corporation	3710	Sulfuric acid		172.80	CUM	T	D
13-79-0022	MKK Steel Corporation	3710	Zinc ammonium chloride		57.60	CUM	T	D
13-79-0023	Cosmos Bottling Corporation	3134	Chlorinated solvents		1.14	T	D	B
13-79-0023	Cosmos Bottling Corporation	3134	Caustic soda		43.20	T	T	B
13-79-0024	Maunlad Canning Corporation	3115	Fish residues/fish scales		144.00	T	D	D
13-79-0024	Maunlad Canning Corporation	3115	Vegetable oils		360.00	LI	D	U
13-79-0024	Maunlad Canning Corporation	3115	Grease trap waste		240.00	KGS	U	U
13-79-0024	Maunlad Canning Corporation	3115	Non-toxic salts		180.00	T	U	U
13-79-0024	Maunlad Canning Corporation	3115	Alkali wastes		5.40	T	U	U
13-79-0026	Philippine Ink Corporation	3529	Alkaline cleaners		3.60	T	D	D
13-79-0026	Philippine Ink Corporation	3529	Printing inks and lump forms		1.00	T	D, T	D
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117	Fumed air		1.60	T		B
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117	Wash water		50.00	T		D
13-79-0029	JVC Steam Laundry, Inc.	3117	Filter residue		18.00	T	L	D
13-80-0006	Pepsi-Cola Far East Trade Dev't. Co., Inc.	3134	Textile wastes					
13-80-0009	Metoxide Philippines Corporation	3511						
13-80-0011	Rohm and Haas Philippines, Inc.	3511						
13-80-0015	Chemphil-LMG, Inc. (Inorganic Division)	3511						
13-80-0016	Trimex Chemical Industries Corp.	3511						
13-80-0028	Dutch Boy Philippines, Inc.	3521						
13-80-0032	Roosevelt Chemical, Inc.	3521						
13-80-0049	Rescor Enterprises, Inc.	3529						
13-80-0050	Asian Chemical Corporation	3540						
13-80-0053	Philippine YTK Industry, Inc.	3819						

EMB Hazardous Waste Tracking Database

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**Table 8.4 Estimate of Amount of Non-hazardous Solid Wastes
Generated at Site Each Year**

INST_ID	INSTNAME	PSIC1	SOLID_QTY TONNES	SOLID_DES	BRIEF DESCRIPTION OF SOLID WASTES
13-77-0001	La Tondela Distillers, Inc.	3131	2,567.00	Cullets	
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134	52.00	Lime slurry	
13-77-0003	SMPP - Farila Carton Plant	3412			
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511			12.50 Worn-out wooden pallets, plastics, metal caps, ordinary garbage, absorbent materials (sawdust)
13-77-0005	YSS Laboratories Company, Inc.	3522			
13-77-0006	Procter and Gamble Philippines, Inc.	3523			5,000.00 Trash, scrap materials, paper and plastics
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523			1,000.00 Scrap metals, used building materials, cardboard paper, plastic bags, spent bleaching earth and household garbage
13-77-0008	SMC - Plastic Case Plant	3560			
13-77-0009	SMC - Mold Manufacturing Plant	3620			
13-77-0010	SMC-SMPP-Farila Packaging Products (Mila Glass)	3620			
13-77-0011	PNOC Shipping and Transport Corporation	7132			
13-77-0012	EXXON Chemical Philippines	3540			
13-77-0013	Constant Plating Center				
13-77-0014	Well Ever Electroplating Shop	3117			
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3833			
13-78-0002	P.I. Manufacturing, Inc.	3511			
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3133			
13-78-0004	San Miguel Corporation - Polo Brewer	3812			
13-78-0005	Pedson Stainless Steel Corporation	3712			
13-78-0006	Mayer Steel Pipe Corporation				
13-78-0007	Continental Steel Manufacturing Corporation				
13-78-0008	Cleveland Textile Mills, Inc.				
13-78-0009	Essential Manufacturing				
13-78-0010	Moblex Products, Inc.				
13-78-0011	Polyglass International Manufacturing Corp.				
13-78-0012	FEJEA Enterprises	3710			
13-78-0013	Inter-World Steel Mills, Inc.	3124			
13-78-0014	Grand Cathay Food Mfg., Corporation	3124			
13-78-0015	Mixwel Food Products, Inc.	3720			
13-78-0016	Metal Plus Industries				
13-78-0017	Fastbrite Industrial Plating Corp.				
13-78-0018	Grace Park Industries, Inc.	3320			
13-78-0019	Luxury Metal Manufacturing Corp.	3720			
13-78-0020	Dyson Surface Coating Corp.				
13-78-0021	New, M.E. Moses Enterprises				
13-78-0022	Geitech Electroplating				
13-78-0023	Polymedic General Hospital				
13-78-0024	Signal Electric Ind. Inc.				
13-79-0001	Purefoods Corporation	3111			
13-79-0002	Philippine Dairy Products Corporation	3113			
13-79-0003	SYSL International, Inc.	3129			
13-79-0004	Qualitech Chemical Corp.	3511			
13-79-0005	Consolidated Industrial Cases, Inc.-Balintawa	3511			
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3521			
13-79-0007	Cardinal Industrial, Inc.	3521			
13-79-0008	Manufacturing Services and Trade Corporation	3523			
13-79-0009	Pilipinas Kaco, Inc. (Household Division)	3523			
13-79-0010	Republic Chemical Industries, Inc.	3529			
13-79-0011	Sime Darby Pilipinas, Inc.	3551			
13-79-0012	Labtech Manufacturing Industries	3825			

ESTIMATE OF AMOUNT OF NONHAZARDOUS SOLID WASTES GENERATED AT SITE EACH YEAR

INST. ID	INSTNAME	PSIC1	SOLID_QTY	SOLID_DES	SHIP DESCRIPTION OF SOLID WASTES
13-79-0013	C. C. Unson Co., Inc.	3834	1,263.00	Lead drosses and scrap plates	
13-79-0014	Dais General Phils., Inc.	3836			
13-79-0015	Trust Chemicals, Inc.	6170			
13-79-0016	General Textiles, Inc.	3211			
13-79-0017	Twin Aces Industries, Inc.	3521			
13-79-0018	Kolora Ink and Chemical Corporation	3529			
13-79-0019	Paron Trading				
13-79-0020	Hi-Tex Industrial Corporation				
13-79-0021	Union Refinery Corp.	2221			
13-79-0022	MKK Steel Corporation	3710			
13-79-0023	Cosmos Bottling Corporation	3134			
13-79-0024	Mauried Canning Corporation	3115			
13-79-0025	Rose Food Product Corp.	3124			
13-79-0026	Philippine Ink Corporation	3529			
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117			
13-79-0028	State Manufacturing Ind.				
13-79-0029	JVC Steam Laundry, Inc.				
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514			
13-80-0002	Mead Johnson Philippines, Inc.	3112			
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1211			
13-80-0004	Monterey Farms Corporation (Piggery)	1213			
13-80-0005	Great Effect Enterprises Inc.	9730			
13-80-0006	Pepsi-Cola Far East Trade Dev't Co., Inc.	3134			
13-80-0007	Solid Mills, Inc.	3222			
13-80-0008	Packaging Products Corporation	3412			
13-80-0009	Meloxida Philippines Corporation	3511			
13-80-0010	Easy Grow Industries, Inc.	9730			
13-80-0011	Rohn and Haas Philippines, Inc.	3511			
13-80-0012	Union Ajinomoto, Inc.	3511			
13-80-0013	Unifox Industrial Corporation	3511			
13-80-0014	Resins, Inc.	3511			
13-80-0015	Chemphil-LMG, Inc. (Inorganic Division)	3511			
13-80-0016	Trinex Chemical Industries Corp.	3511			
13-80-0017	Polyphosphates, Inc.	3511			
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)	3511			
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy)	3511			
13-80-0020	Borden International Philippines, Inc.	3515			
13-80-0021	Polymer Chemicals, Inc.	3513			
13-80-0022	EM-POL Corporation	3513			
13-80-0023	Kemwerke, Incorporated	3513			
13-80-0024	Hoecrist Philippines, Inc.	3514			
13-80-0025	Wrigley Philippines, Inc.	3124			
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521			
13-80-0027	Nippon Paint Philippines, Inc.	3521			
13-80-0028	Dutch Boy Philippines, Inc.	3521			
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521			
13-80-0030	Atlantic Coatings, Inc.	3521			
13-80-0031	Charter Chemicals and Coating Corporation	3521			
13-80-0032	Roosevelt Chemical, Inc.	3521			
13-80-0033	BOIE Incorporated	3522			

ESTIMATE OF AMOUNT OF NONHAZARDOUS SOLID WASTES GENERATED AT SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SOLID_QTY TONNES	SOLID_DES BRIEF DESCRIPTION OF SOLID WASTES
13-80-0034	Boie-Takeda Chemicals, Inc.	3522		
13-80-0035	Boots Pharmaceuticals (Phils.), Inc.	3522	0.50	Old packaging materials and printed matters
13-80-0036	Merck, Inc.	3522		
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522		Ciprofloxacin debris from tableting of Ciproflox tablets
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	104.00	Domestic garbage/pharmaceutical wastes
13-80-0039	Sterling Products International, Inc.	3522	31.17	Solid wastes consisting of papers, cardboard, woods, glasses, plastics, metal drums, general trash and construction debris
13-80-0040	Abbott Laboratories (Philippines)	3522	0.27	Organic and inorganic chemical wastes generated during manufacturing operations
13-80-0041	United Laboratories, Inc.	3522	440.00	Paper, corrugated cartons, tablets, powders, capsules, granules
13-80-0042	Warner Lambert Philippines, Inc.	3522	80.00	Garbage, paper and carton-based wastes, sugar/glucose-based confectionery products
13-80-0043	Interphl Laboratories, Inc.	3522	140.00	Garbage, paper materials, plastic
13-80-0044	GX International, Inc.	3522		
13-80-0045	Pfizer, Inc.	3522	50.00	A combination of trash, cafeteria wastes and other solid wastes
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523	1,534.86	General trash such as cartons, woods, metals, paper, plastic and bags/sacks
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	232.40	Combination of plastic film, non-woven fabric of polyester material, talc, kitchen wastes, office wastes, carton boxes,
13-80-0048	H.B. Fuller (Philippines), Inc.	3523		
13-80-0049	Resicor Enterprises, Inc.	3523		
13-80-0050	Asian Chemical Corporation	3540		
13-80-0051	Philippine Glass Bulbs	3620		
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3812		
13-80-0053	Pilipinas YTK Industry, Inc.	3819		
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	330.50	Garbage, by-product wastes, salvageable wastes
13-80-0055	Philips Semiconductor Phils., Inc.	3825	278.00	Moulding plastic runners, grits, papers, cartons
13-80-0056	Pacific Semiconductors, Inc.	3825	115.06	Product fail-outs, tails and dambars, inked dice, used solder/anode bars and various types of empty plastic containers
13-80-0057	Motorola Philippines, Inc.	3825	156.00	Cull runners (excess plastic materials from a newly-encapsulated integrated circuit)
13-80-0058	Zilog Philippines, Inc.	3825	65.00	Carton boxes, papers, scrap metal plastic sheets
13-80-0059	AMI (Philippines), Inc.	3825	64.00	End rails and dambar deflash residue (copper), pellet in anode, trimming from the mold operation
13-80-0060	Amkor/Anam Philippines, Inc.	3825	15.00	Purrescibles, plastics, woods, scrap metals, dambars, trimmings
13-80-0061	Automated Microelectronics, Inc.	3825	3,519.00	Garbage, industrial solid waste
13-80-0062	Philips Consumer Products	3832	11.00	Cartons, paper and styrofoam used in packaging
13-80-0063	Eveready Battery Company (Phil.), Inc.	3834	101.00	Scrap paper, cells, boards and inplate parts
13-80-0064	Philips Electronics and Lighting, Inc.	3839	1,625.00	Glass cullets from lamp manufacturing, cartons, wood and paper
13-80-0065	3M Phils., Inc.	3909	6,391.00	Tapes, abrasives, cartons, paper, wood, scotch brite and drums
13-80-0066	Elan Pharma Phils., Inc.	6170	0.10	Obsolete packaging materials
13-80-0067	Wellcome Philippines, Inc.	6170	0.11	Expired products
13-80-0068	G. D. Searle Philippines, Inc.	6170	532.00	Modified starches, xanthan gum and dextrose for food and pharmaceutical applications
13-80-0069	RP Chem, Inc.	6170		
13-80-0070	Alcon Laboratories (Phil.) Inc.	6170		
13-80-0071	ARMEDIC Philippines, Inc.	6170		
13-80-0072	Schering Philippine Corporation	6170		
13-80-0073	Marsman and Co., Inc.	6170	0.50	Organic chemicals, pharmaceutical wastes and drugs
13-80-0074	Upjohn Inc.	6170	0.40	Expired tablets, capsules and ointment
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.	6170	0.90	Expired pharmaceutical finished product, expired raw materials and packaging materials
13-80-0076	Sandoz Philippines, Inc.	6170		
13-80-0077	Boehringer Ingelheim Phils., Inc.	3211	216.00	Filter cake, impurities from raw materials (soda ash, silica sand and filler aid)
13-80-0078	Panalon Philippines, Inc.	3511	50.83	Electric arc furnace (EAF) dust and slag, mill scale, refractory bricks, sludge
13-80-0079	Integral Chemical Corporation	3712		
13-80-0080	GST Philippines, Inc.	3580		
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.	3860		
13-80-0082	NAPOCOR - Maintenance Engineering Center	3825		
13-80-0083	Allegro Microsystems Phils., Inc.			

ESTIMATE OF AMOUNT OF NONHAZARDOUS SOLID WASTES GENERATED AT SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SOLID_QTY TONNES	SOLID_DES BRIEF DESCRIPTION OF SOLID WASTES
13-80-0084	Epic Electronics Industries Corporation	3825		
13-80-0085	Chemphi Albright & Wilson Corp.	3511	240.00	Garbages such as disposable scrap wood, paper, plastic (PE/PP/PVC), steel, filling materials, construction discards, etc
13-80-0086	Honda Philippines, Inc.	3846		
13-80-0087	Alpolac, Incorporated	3513	2.60	Paper and plastic bags used to contain powder/flakes raw materials
13-80-0088	Astron Philippines Inc.	3832	12.00	Paper, carton boxes
13-80-0089	Manila Electric Company		-	Sludges on plating tank bottoms
13-80-0090	L.G. Fernandez Plating Services			
13-80-0091	CD Electroplating and Fabrication, Inc.			
13-80-0092	American Packing Industries (Phil.) Corp.			
13-80-0093	Borden International Phils., Inc.	3513	168.00	Ordinary garbage
13-80-0094	BOIE Incorporated	3522		Expired drug prod., rejected tablets, capsules etc.
13-80-0095	Gelmart Industries Phils., Inc.	3210		

**Table 8.5 Estimate of Amount of Non-hazardous Liquid Wastes
Generated at Site Each Year**

INST_ID	INSTNAME	PSIC1	LIQID_QTY CUBIC METERS	LIQID_DES BRIEF DESCRIPTION OF LIQUID WASTES
13-77-0001	La Tondeña Distillers, Inc.	3131		
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134	155.00	Caustic washing
13-77-0003	SMPP - Farola Carton Plant	3412		
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	35.00	Contaminated water/effluents with pesticide trace
13-77-0005	YSS Laboratories Company, Inc.	3522		
13-77-0006	Procter and Gamble Philippines, Inc.	3523	150,000.00	Sanitary wastewater, water from washings
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523	969.00	Waste oil from power plant and washings from floor and equipment
13-77-0008	SMC - Plastic Case Plant	3560		
13-77-0009	SMC - Mold Manufacturing Plant	3620		
13-77-0010	SMC-SMPP-Farola Packaging Products (Mia. Glass)	3620	5.00	Oil-water mixtures
13-77-0011	PNOC Shipping and Transport Corporation	7132		
13-77-0012	EXXON Chemical Philippines	3540		
13-77-0013	Constant Plating Center			
13-77-0014	Well Ever Electroplating Shop			
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3117		
13-78-0002	P.I. Manufacturing, Inc.	3633	1,052.00	Sulfuric acid and alkaline degreaser
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511		
13-78-0004	San Miguel Corporation - Polo Brewer	3133		
13-78-0005	Padoson Stainless Steel Corporation	3812	42.00	Wastewater from APCF, pickling, cooling system
13-78-0006	Mayer Steel Pipe Corporation	3712		
13-78-0007	Continental Steel Manufacturing Corporation	3712		
13-78-0008	Cleveland Textile Mills, Inc.			
13-78-0009	Essential Manufacturing			
13-78-0010	Moldex Products, Inc.		4,320.00	Wastewater (Production)
13-78-0011	Polyglass International Manufacturing Corp.		240.00	
13-78-0012	FE/EA Enterprises			
13-78-0013	Inter-World Steel Mills, Inc.	3710		
13-78-0014	Grand Cathay Food Mfg., Corporation	3124		
13-78-0015	Mixwel Food Products, Inc.	3124		
13-78-0016	Metal Plus Industries	3720		
13-78-0017	Fastbrite Industrial Plating Corp.			
13-78-0018	Grace Park Industries, Inc.	3320		
13-78-0019	Luxury Metal Manufacturing Corp.	3720		
13-78-0020	Dyson Surface Coating Corp.			
13-78-0021	New, M.E. Moses Enterprises			
13-78-0022	Geltech Electroplating			
13-78-0023	Polymedic General Hospital			
13-78-0024	Signal Electric Ind. Inc.			
13-79-0001	Purefoods Corporation	3111		
13-79-0002	Philippine Dairy Products Corporation	3113	178,120.00	Used oil
13-79-0003	SYSU International, Inc.	3129	30,195.00	BMC Production wastewater, scum, activated sludge
13-79-0004	Qualitech Chemical Corp.	3511	70.00	Production wastewater
13-79-0005	Consolidated Industrial Gases, Inc.-Balintawa	3511		Equipment washings
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3521		
13-79-0007	Cardinal Industrial, Inc.	3521	35.50	Soap lyes from soapmaking department
13-79-0008	Manufacturing Services and Trade Corporation	3523		
13-79-0009	Philippine Kao, Inc. (Household Division)	3523	3.40	Water-based paint washings, epoxy resin residue, oil/grease/kerosene mixture
13-79-0010	Republic Chemical Industries, Inc.	3529	94,783.00	Overflow from septic tanks and effluents from power house and the factory
13-79-0011	Sime Darby Philippines, Inc.	3551	9,218.97	Consists mostly of wastewater from electroplating process and used chemicals from demarking solution
13-79-0012	Labtech Manufacturing Industries	3525		

ESTIMATE OF AMOUNT OF NONHAZARDOUS LIQUID WASTES GENERATED AT SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	LIQD_QTY CUBIC METERS	LIQD_DES BRIEF DESCRIPTION OF LIQUID WASTES
13-79-0013	C. C. Unson Co., Inc.	3834		
13-79-0014	Data General Phils., Inc.	3836		
13-79-0015	Trust Chemicals, Inc.	6170	420.00	Used oil
13-79-0016	General Textiles, Inc.	3211		
13-79-0017	Twin Ace Industries, Inc.	3521		
13-79-0018	Kolora Ink and Chemical Corporation	3529		
13-79-0019	Paran Trading			
13-79-0020	Hi-Tex Industrial Corporation			
13-79-0021	Union Refinery Corp.	2221	2.40	Oil/water mixture
13-79-0022	MKK Steel Corporation	3710		
13-79-0023	Coasma Bottling Corporation	3134	1,100.00	Liquid wastes generated during production operation such as washing, cleaning, domestic and cooling
13-79-0024	Maurited Canning Corporation	3115	-	Oils mixed with water
13-79-0025	Rose Food Product Corp.	3124	898.00	Domestic water used for washing and cleaning
13-79-0026	Philippine Ink Corporation	3529	50.00	Wash water
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117		Sludges after dewatering
13-79-0028	State Manufacturing Ind.			
13-79-0029	JVC Steam Laundry, Inc.			
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	5,110.00	Effluent from septic tank, floor washings
13-80-0002	Meat Johnson Philippines, Inc.	3112	45,000.00	Domestic waste
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1211	192,136.00	Wash water used mainly for pen cleaning
13-80-0004	Monterey Farms Corporation (Piggery)	1213	502,480.00	Wash water used in animal bathing and pen cleaning
13-80-0005	Great Effect Enterprises Inc.	9730	426,000.00	
13-80-0006	Pepsi-Cola Far East Trade Dev't Co., Inc.	3134	1,500.00	Washing of beverage concentrates, sanitation water, sewage water
13-80-0007	Solid Mills, Inc.	3222	28,094.10	Domestic waste
13-80-0008	Packaging Products Corporation	3412		
13-80-0009	Metoxide Philippines Corporation	3511	373,000.00	
13-80-0010	Easy Grow Industries, Inc.	9730	3,285.00	Whitewater from process area
13-80-0011	Rohn and Haas Philippines, Inc.	3511	2,310.00	Treated wastewater from caustic soda plant
13-80-0012	Union Alimento, Inc.	3511	0.10	Dissolved lead salts from chemical analysis of the product
13-80-0013	Unilox Industrial Corporation	3511	800,000.00	River water used as cooling water
13-80-0014	Resins, Inc.	3511		
13-80-0015	Chemphil-LMG, Inc. (Inorganic Division)	3511		
13-80-0016	Trinex Chemical Industries Corp.	3511	5,677.50	Brine water - hard water discard from EDR water treatment plant containing mineral salts and impurities from raw water
13-80-0017	Polyphosphates, Inc.	3511		
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)	3511		
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy)	3511	3,120,000.00	Water used for cleaning glasswares, drums, various containers, building windows and for bathing of plant workers which g
13-80-0020	Borden International Philippines, Inc.	3515	195.00	Water of reaction for manufacture of alkyl resins
13-80-0021	Polymer Chemicals, Inc.	3513	75.00	Water of reaction removed during process, by-product of esterification process
13-80-0022	EM-POL Corporation	3513		
13-80-0023	Kemwerke, Incorporated	3513		
13-80-0024	Hoechst Philippines, Inc.	3514	2.90	Cooking oil used to clean equipment
13-80-0025	Wrigley Philippines, Inc.	3124		Washwater; wastewater from canteen, comfort rooms and laboratories
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521	19.20	Dirty or wash thinner
13-80-0027	Nippon Paint Philippines, Inc.	3521	732.00	Effluent
13-80-0028	Dutch Boy Philippines, Inc.	3521	8,000.00	Domestic sewage, general cooling system, nitro house garden sprinkler and stockyard gardening
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521	50.00	Wastewater from cleaning of containers, floorings and workers
13-80-0030	Atlantic Coatings, Inc.	3521		
13-80-0031	Charter Chemicals and Coating Corporation	3521		Wash solvent is put back in the mixer and mixed with paint
13-80-0032	Roosevelt Chemical, Inc.	3521		Chemical reagent wastes, expired drug products (syrups and suspensions)
13-80-0033	BOIE Incorporated	3522		

EMB Hazardous Waste Tracking Database

ESTIMATE OF AMOUNT OF NONHAZARDOUS LIQUID WASTES GENERATED AT SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	LIQID_QTY CUBIC METERS	LIQID_DES BRIEF DESCRIPTION OF LIQUID WASTES
13-80-0034	Boie-Takeda Chemicals, Inc.	3522		
13-80-0035	Boots Pharmaceuticals (Phil.), Inc.	3522	0.50	Ophthalmic solution and syrups/drops
13-80-0036	Merk, Inc.	3522		
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522		
13-80-0038	Astra Pharmaceuticals (Phil.), Inc.	3522	20,000.00	Domestic wastewater
13-80-0039	Sterling Products International, Inc.	3522	5,700.00	Water from toilets, canteen kitchen production washrooms, laboratory sinks
13-80-0040	Abbott Laboratories (Philippines)	3522	0.05	Acid wastes, organic chemicals and other pharmaceutical waste during manufacturing operations
13-80-0041	United Laboratories, Inc.	3522	0.50	Mixed chemicals, acids, alkali, solvents, ingredients in liquid products
13-80-0042	Warner Lambert Philippines, Inc.	3522	30,000.00	Domestic waste
13-80-0043	Interphill Laboratories, Inc.	3522	2,640.00	Domestic waste, washings
13-80-0044	GX International, Inc.	3522		
13-80-0045	Pfizer, Inc.	3522	23,750.00	Wastewater from QC laboratory, comfort rooms, cafeteria and manufacturing process
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523	105,000.00	Treated wastewater
13-80-0047	Johnson and Johnson (Philippines), Inc.	3529		
13-80-0048	H.B. Fuller (Philippines), Inc.	3529		
13-80-0049	Resistor Enterprises, Inc.	3540		
13-80-0050	Asian Chemical Corporation	3620		
13-80-0051	Philippine Glass Bulbs	3812		
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3819		
13-80-0053	Pilipinas YTK Industry, Inc.	3819		
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3825		
13-80-0055	Philips Semiconductor Phils., Inc.	3825		
13-80-0056	Pacific Semiconductors, Inc.	3825		
13-80-0057	Motorola Philippines, Inc.	3825		
13-80-0058	Zilog Philippines, Inc.	3825		
13-80-0059	AMI (Philippines), Inc.	3825		
13-80-0060	Ankor/Anam Pilipinas, Inc.	3825		
13-80-0061	Automated Microelectronics, Inc.	3832		
13-80-0062	Philips Consumer Products	3834		
13-80-0063	Eveready Battery Company (Phil.), Inc.	3839		
13-80-0064	Philips Electronics and Lighting, Inc.	3909		
13-80-0065	3M Phils., Inc.	6170		
13-80-0066	Elan Pharma Phils., Inc.	6170		
13-80-0067	Wellcome Philippines, Inc.	6170		
13-80-0068	G. D. Searle Philippines, Inc.	6170		
13-80-0069	RP Chem. Inc.	6170		
13-80-0070	Alcon Laboratories (Phil.) Inc.	6170		
13-80-0071	Schering Philippine Corporation	6170		
13-80-0072	Marsman and Co., Inc.	6170		
13-80-0073	Upjohn Inc.	6170		
13-80-0074	Rhone-Poulenc Rorer Phils., Inc.	6170		
13-80-0075	Sandoz Philippines, Inc.	6170		
13-80-0076	Boehringer Ingelheim Phils., Inc.	6170		
13-80-0077	Panellon Philippines, Inc.	3211		
13-80-0078	Integral Chemical Corporation	3511		
13-80-0079	GST Philippines, Inc.	3712		
13-80-0080	Philippine Worldwide Mfg. Plastic Corp.	3580		
13-80-0081	NAPOCOR - Maintenance Engineering Center	3960		
13-80-0082	Allegro Microsystems Phils., Inc.	3825		
13-80-0083				

EMB Hazardous Waste Tracking Database

ESTIMATE OF AMOUNT OF NONHAZARDOUS LIQUID WASTES GENERATED AT SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	LIQID_QTY CUBIC METERS	LIQID_DES BRIEF DESCRIPTION OF LIQUID WASTES
13-80-0084	Epic Electronics Industries Corporation	3825		
13-80-0085	Chemphil Abright & Wilson Corp.	3511	48,000.00	process waste, cooling water, fire water, EDR concentrate, ion exchange regenerants, rain water, sewage, etc
13-80-0086	Honda Philippines, Inc.	3846	720.00	Overflow water from rinsing tanks
13-80-0087	Alpolac, Incorporated	3513		
13-80-0088	Astron Philippines Inc.	3882		
13-80-0089	Manila Electric Company		906.00	Pre-treatment, plating and post-treatment rinse water
13-80-0090	L.G.Fernandez Plating Services			
13-80-0091	CD Electroplating and Fabrication, Inc.			
13-80-0092	American Packing Industries (Phil.) Corp.			
13-80-0093	Borden International Phils., Inc.	3513	3,120,000.00	Water used for cleaning glasswares drums various containers, building windows etc.
13-80-0094	BOIE Incorporated	3522		Chemical reagent waste, expired drug prod (syrups and suspensions)
13-80-0095	Gelmat Industries Phils., Inc.	3210		

**Table 8.6 Estimate of Amount of Hazardous Waste Stored on Site
Each Year**

INST_ID	INSTNAME	PSIC1	STORE_QTY TONNES	STORE_DES BRIEF DESCRIPTION OF STORED WASTE
13-77-0001	La Torderia Distillers, Inc.	3131		
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134		
13-77-0003	SMPP - Farcia Carton Plant	3412		
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	12.00	Ink washings
13-77-0005	YSS Laboratories Company, Inc.	3522	70.00	Raduradionoff-specs pesticides (accumulation), solvents flushings, sludge, containers extoxic product
13-77-0006	Procter and Gamble Philippines, Inc.	3523	0.01	Pharmaceutical wastes and drugs
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523	500.00	Acid from electrostatic precipitator, off-quality acid from sulfonation plant
13-77-0008	SMC - Plastic Case Plant	3560	2.76	Used oil (Tellus oil 68)
13-77-0009	SMC - Mold Manufacturing Plant	3620	16.80	Oil waste
13-77-0010	SMC-SMPP-Farcia Packaging Products (Mia, Glass)	3620		
13-77-0011	PNOC Shipping and Transport Corporation	7132	3.00	Petroleum-based chemical combination in liquid form (aliphatic, aromatic and oxygenated hydrocarbons)
13-77-0012	EXXON Chemical Philippines	3540		
13-77-0013	Constant Plating Center			
13-77-0014	Well Ever Electroplating Shop			
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3117		
13-78-0002	P.I. Manufacturing, Inc.	3833	0.09	Nickel and sulfates
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511		
13-78-0004	San Miguel Corporation - Polo Brewer	3133		
13-78-0005	Padoson Stainless Steel Corporation	3812		
13-78-0006	Mayer Steel Pipe Corporation	3712		
13-78-0007	Continental Steel Manufacturing Corporation	3712		
13-78-0008	Claveland Textile Mills, Inc.			
13-78-0009	Essential Manufacturing			
13-78-0010	Moldex Products, Inc.		800.00	
13-78-0011	Polyglass International Manufacturing Corp.			
13-78-0012	FEJEA Enterprises			
13-78-0013	Inter-World Steel Mills, Inc.	3710		
13-78-0014	Grand Cathay Food Mfg. Corporation	3124		
13-78-0015	Mixwel Food Products, Inc.	3124		
13-78-0016	Metal Plus Industries	3720		Discarded gold and brass solutions
13-78-0017	Fastbrite Industrial Plating Corp.			
13-78-0018	Grace Park Industries, Inc.	3320		
13-78-0019	Luxury Metal Manufacturing Corp.	3720		Solid precipitate from nickel plating solution
13-78-0020	Dyson Surface Coating Corp.			
13-78-0021	New. M.E. Moses Enterprises			
13-78-0022	Geltech Electroplating			
13-78-0023	Polymedic General Hospital			
13-78-0024	Signal Electric Ind. Inc.			
13-79-0001	Purefoods Corporation	3111		Pathological wastes (human organs, tissues and/or materials)
13-79-0002	Philippine Dairy Products Corporation	3113	18.00	Metal Sludges
13-79-0003	SYSU International, Inc.	3129		
13-79-0004	Qualitech Chemical Corp.	3511		
13-79-0005	Consolidated Industrial Gases, Inc.-Baintawa	3511	45.00	Carbide sludge from acetylene plant
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3521	4.00	Solvent washings of mixing tanks with traces of toxic and flammable chemical raw materials
13-79-0007	Cardinal Industrial, Inc.	3521		
13-79-0008	Manufacturing Services and Trade Corporation	3523		
13-79-0009	Philinas Kco, Inc. (Household Division)	3523	1.28	Empty steel drums, solidified and polymerized wastes
13-79-0010	Republic Chemical Industries, Inc.	3529	24.00	Dirty oil
13-79-0011	Sime Darby Pilipinas, Inc.	3551	0.25	Sludge from electroplating process and used chemicals from demarking and shipping process
13-79-0012	Labtech Manufacturing Industries	3625		

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE STORED ON SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	STORE_QTY TONNES	STORE_DES BRIEF DESCRIPTION OF STORED WASTE
13-79-0013	C. C. Unson Co., Inc.	3834		
13-79-0014	Data General Phils., Inc.	3836	66.00	Wastewater sludge with yellowish brown color, odorless and in lump form
13-79-0015	Trust Chemicals, Inc.	6170		
13-79-0016	General Textiles, Inc.	3211	1,500.00	Textiles wastewater
13-79-0017	Twin Aces Industries, Inc.	3521	0.70	Sludge from washing machineries and tubs E 502 D
13-79-0018	Kokora Ink and Chemical Corporation	3529	0.50	Sludge from washing machines and tubs (solvent based) E610 D
13-79-0019	Paran Trading		1.00	Used acid
13-79-0020	Hi-Tex Industrial Corporation			
13-79-0021	Union Refinery Corp.	2221	3.00	Acid wastes (sulfuric)
13-79-0022	MKK Steel Corporation	3710	5.60	Color green solution containing iron
13-79-0023	Comcos Bottling Corporation	3134	53.24	Caustic soda liquid/flakes used for bottle washing/chlorinated solvents used for water treatment
13-79-0024	Mauritad Canning Corporation	3115		
13-79-0025	Rose Food Product Corp.	3124		
13-79-0026	Philippine Ink Corporation	3529	1.00	Paste and lump forms
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117		
13-79-0028	State Manufacturing Ind.			
13-79-0029	JVC Steam Laundry, Inc.			
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	13.00	Toxic, flammable, M504, J201, F702, C301, B207, D401, C398, B204, C302, F701, B208
13-80-0002	Meed Johnson Philippines, Inc.	3112		
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1211	35732.00	Manure (feces & urine), by-product of animal perturbation
13-80-0004	Monterey Farms Corporation (Piggery)	1213	86,636.00	Manure (feces & urine), animal mortalities and by-product
13-80-0005	Great Effect Enterprises Inc.	9730	74.40	Small and used pumice stones, fine sand, cotton lint
13-80-0006	Pepsi-Cola Far East Trade Dev't. Co., Inc.	3134		
13-80-0007	Solid Mills, Inc.	3222		
13-80-0008	Packaging Products Corporation	3412	12.72	Ink washings and spent photopolymer platemaking solvent
13-80-0009	Metoxide Philippines Corporation	3511	65.26	Small and used pumice stones, fine sands, cotton lint
13-80-0010	Easy Grow Industries, Inc.	9730	141.90	Sludge from sandfilters and contaminated process waste
13-80-0011	Rokm and Haas Philippines, Inc.	3511	12.36	Chemically-fixed waste as mud blocks from treated sludge from production of caustic soda using Hg process and spent acid
13-80-0012	Union Ajinomoto, Inc.	3511	3.00	Lead cross, lead salts/scrap powder
13-80-0013	Unioil Industrial Corporation	3511	200.00	Calcium sulfite/sulfate combination from the double alkali process of SO2 removal
13-80-0014	Resins, Inc.	3511		
13-80-0015	Chemphil-LMS, Inc. (Inorganic Division)	3511		
13-80-0016	Trimex Chemical Industries Corp.	3511	0.80	Arsenic sulfide sludge contains As2O3 precipitate, peccate filter aid, residual phosphoric acid and moisture, neutraliz
13-80-0017	Polyphosphates, Inc.	3511	10.00	Carbide residue plus water
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)	3511		
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy	3511		
13-80-0020	Borden International Philippines, Inc.	3515		
13-80-0021	Polymer Chemicals, Inc.	3513	0.05	Empty 50-kg capacity drum containers
13-80-0022	EM-POL Corporation	3513	1.80	Solvent washings of kettles containing 7-10% resin
13-80-0023	Kemwerke, Incorporated	3513		Plastic and paper bags, sawdust with spillage and wastewater, crushed drums
13-80-0024	Hoechst Philippines, Inc.	3514		
13-80-0025	Wrigley Philippines, Inc.	3124		
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521		
13-80-0027	Nippon Paint Philippines, Inc.	3521	183.00	Dry solids coming from the wastewater treatment plant
13-80-0028	Dutch Boy Philippines, Inc.	3521	5.00	Wastewater contaminated with paints, varnishes, resins, organic solvents and oil
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521		
13-80-0030	Atlantic Coatings, Inc.	3521		
13-80-0031	Charter Chemicals and Coating Corporation	3521		
13-80-0032	Roosevelt Chemical, Inc.	3521		
13-80-0033	BOIE Incorporated	3522		Expired drug products and chemical reagent wastes

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE STORED ON SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	STORE_QTY TONNES	STORE_DES BRIEF DESCRIPTION OF STORED WASTE
13-80-0034	Boie-Takeda Chemicals, Inc.	3522		Expired drugs and raw materials
13-80-0035	Boots Pharmaceuticals (Phils.), Inc.	3522	0.10	Expired tablets, melted lozenges, discolored ointments, liquids and cream
13-80-0036	Merck, Inc.	3522	0.75	Pharma products, lab reagents, pigments, raw materials and other chem. prep'n's w/c are rendered unfit for commercial di
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522		
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	1.80	Rejected products/expired goods
13-80-0039	Sterling Products International, Inc.	3522		
13-80-0040	Abbott Laboratories (Philippines)	3522	30.72	Composed of all reagents, organic solvents and acid waste
13-80-0041	United Laboratories, Inc.	3522	4.00	Rejected tablets, capsules, powders, granules, mixed chemicals, foil, plastics, trash, paper, solvents, acid, alkali
13-80-0042	Warner Lambert Philippines, Inc.	3522		
13-80-0043	Interphill Laboratories, Inc.	3522		
13-80-0044	GX International, Inc.	3522		
13-80-0045	Pfizer, Inc.	3522		
13-80-0046	Coigale-Palmolive Philippines, Inc.	3523	4.77	Materials used as catalyst in SO2 to SO3 converter
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523		
13-80-0048	H.B. Fuller (Philippines), Inc.	3529		
13-80-0049	Rescor Enterprises, Inc.	3529		
13-80-0050	Asian Chemical Corporation	3540		
13-80-0051	Philippine Glass Bulbs	3620	0.72	Oil used as lubricant and bunker oil collected in storage oil traps
13-80-0052	Phoenix Iron and Steel Corp. (FISCOR)	3812	3,645.93	Non-volatile oxides produced during steelmaking (slag), particulate matter produced during smelting (dust)
13-80-0053	Pilpinas YTK Industry, Inc.	3819		
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	7.02	Waste solvent mixtures, waste oils, lubricants and thinner mix
13-80-0055	Philips Semiconductor Phils., Inc.	3825	41.75	Heavy metal sludges
13-80-0056	Pacific Semiconductors, Inc.	3825		
13-80-0057	Motorola Philippines, Inc.	3825	1.20	Ink sludge from the pad print operation
13-80-0058	Zilog Philippines, Inc.	3825	1.10	Sludge from wastewater treatment plant
13-80-0059	AMI (Philippines), Inc.	3825	982.00	Metallic sludge
13-80-0060	Amkor/Anam Philippines, Inc.	3825	5.00	Heavy metal sludges
13-80-0061	Automated Microelectronics, Inc.	3825	4.00	Wastewater treatment sludge
13-80-0062	Philips Consumer Products	3834	0.46	Solder flux is an organic substance used during soldering of printed circuit boards while the oil is used as lubricant.
13-80-0063	Eveready Battery Company (Phils.), Inc.	3834		
13-80-0064	Philips Electronics and Lighting, Inc.	3839		
13-80-0065	3M Phils., Inc.	3909	0.41	The oil is used as lubricant and the mercury is collected from the glass traps in the manufacture of fluorescent lamps
13-80-0066	Elan Pharma Phils., Inc.	6170		
13-80-0067	Wellcome Philippines, Inc.	6170	1.32	Expired drug products
13-80-0068	G. D. Searle Philippines, Inc.	6170	0.01	Expired products
13-80-0069	RP Chem. Inc.	6170	0.50	Expired pharmaceutical products
13-80-0070	Alcon Laboratories (Phils.) Inc.	6170	525.00	Food grade phosphates, feed grade vitamins, surfactants, basic chemicals and silicones
13-80-0071	ARMEDIC Philippines, Inc.	6170	500.00	Expired pharmaceutical products
13-80-0072	Schening Philippine Corporation	6170	0.80	Expired stocks
13-80-0073	Marsman and Co., Inc.	6170		
13-80-0074	Uppjohn Inc.	6170		
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.	6170		
13-80-0076	Sanofi Philippines, Inc.	6170	0.50	Capsules, tablets and liquid preparations in their original containers
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170		
13-80-0078	Parelon Philippines, Inc.	3211		
13-80-0079	Integrat Chemical Corporation	3511		
13-80-0080	GST Philippines, Inc.	3712		
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.	3560	75.75	Oil/water mixture
13-80-0082	NAPOCOR - Maintenance Engineering Center	3860	0.20	Dissolved metals (iron-based and copper-based) in acid solution
13-80-0083	Allegro Microsystems Phils., Inc.	3825	2.66	Liquid and solid wastes

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE STORED ON SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	STORE_QTY TONNES	STORE_DES BRIEF DESCRIPTION OF STORED WASTE
13-80-0084	Epic Electronics Industries Corporation	3825		
13-80-0085	Chemphil Albright & Wilson Corp.	3511		2.00 Phosphorus sludge - contains residual yellow phosphorus, contaminated in dirt and other impurities from tank clean-up
13-80-0086	Honda Philippines, Inc.	3846		Metal preparation sludge consisting of silicates, phosphates, zinc, iron and carbonates
13-80-0087	Alpolac, Incorporated	3513		2.50 Water rinsing cont 7-10% latex emulsion resin (water based), Solvent rinsing cont 7-10% resin (solvent based)
13-80-0088	Astron Philippines Inc.	3832		0.48 Liquid flux
13-80-0089	Manila Electric Company			- Toxic insulating oils-polychlorinated biphenyls
13-80-0090	L.G. Fernandez Plating Services			
13-80-0091	CD Electroplating and Fabrication, Inc.			
13-80-0092	American Packing Industries (Phils.) Corp.	3513		0.20 Solid and liquid wastes, polymerized wastes
13-80-0093	Borden International Phils., Inc.	3522		Chemical reagent wastes, expired drug products, rejected capsules, dust powders etc.
13-80-0094	BOIE Incorporated	3210		
13-80-0095	Gelmat Industries Phils., Inc.			

Table 8.7 Estimate of Amount of Hazardous Waste Removed from the Site Each Year

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-77-0001	La Tondéfa Distillers, Inc.	3131	37,440.00
13-77-0002	Coca-Cola Bottlers Philippines, Inc.	3134	
13-77-0003	SMPP - Farola Carton Plant	3412	
13-77-0004	The Shell Chemical Co. (Philippines) Inc.	3511	38.00
13-77-0005	YSS Laboratories Company, Inc.	3522	0.01
13-77-0006	Procter and Gamble Philippines, Inc.	3523	500.00
13-77-0007	Philippine Refining Company, Inc. (Unilever)	3523	
13-77-0008	SMC - Plastic Case Plant	3560	2.76
13-77-0009	SMC - Mold Manufacturing Plant	3620	
13-77-0010	SMC-SMPP-Farola Packaging Products (Mia. Glass)	3620	16.80
13-77-0011	PNOC Shipping and Transport Corporation	7132	12.50
13-77-0012	EXXON Chemical Philippines	3540	10.00
13-77-0013	Constant Plating Center		130.00
13-77-0014	Well Ever Electroplating Shop		-
13-78-0001	Malabon Soap and Oil Industrial Co., Inc.	3117	
13-78-0002	P.I. Manufacturing, Inc.	3833	0.09
13-78-0003	Consolidated Industrial Gases, Inc. (Navotas)	3511	
13-78-0004	San Miguel Corporation - Polo Brewer	3133	1,080.00
13-78-0005	Padoson Stainless Steel Corporation	3812	18.00
13-78-0006	Mayer Steel Pipe Corporation	3712	4.50
13-78-0007	Continental Steel Manufacturing Corporation	3712	
13-78-0008	Cleveland Textile Mills, Inc.		-
13-78-0009	Essential Manufacturing		
13-78-0010	Moldex Products, Inc.		
13-78-0011	Polyglass International Manufacturing Corp.		70.00
13-78-0012	FEJEA Enterprises		-
13-78-0013	Inter-World Steel Mills, Inc.	3710	
13-78-0014	Grand Cathay Food Mfg., Corporation	3124	
13-78-0015	Mixwel Food Products, Inc.	3124	

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE REMOVED FROM THE SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-78-0016	Metal Plus Industries	3720	1.00
13-78-0017	Fastbrite Industrial Plating Corp.		
13-78-0018	Grace Park Industries, Inc.	3320	
13-78-0019	Luxury Metal Manufacturing Corp.	3720	
13-78-0020	Dyson Surface Coating Corp.		
13-78-0021	New. M.E. Moses Enterprises		
13-78-0022	Geltech Electroplating		
13-78-0023	Polymedic General Hospital		3.50
13-78-0024	Signal Electric Ind. Inc.		18.00
13-79-0001	Purefoods Corporation		
13-79-0002	Philippine Dairy Products Corporation	3111	11,856.00
13-79-0003	SYSU International, Inc.	3113	
13-79-0004	Qualitech Chemical Corp.	3129	60.00
13-79-0005	Consolidated Industrial Gases, Inc.-Balintawa	3511	1,115.00
13-79-0006	Pacific Paint and Oil Manufacturing, Inc.	3511	
13-79-0007	Cardinal Industrial, Inc.	3521	4.00
13-79-0008	Manufacturing Services and Trade Corporation	3521	
13-79-0009	Pilipinas Kao, Inc. (Household Division)	3523	
13-79-0010	Republic Chemical Industries, Inc.	3529	1.29
13-79-0011	Sime Darby Pilipinas, Inc.	3551	
13-79-0012	Labtech Manufacturing Industries	3825	9,253.03
13-79-0013	C. C. Unson Co., Inc.	3834	66.00
13-79-0014	Data General Phils., Inc.	3836	
13-79-0015	Trust Chemicals, Inc.	6170	1,500.00
13-79-0016	General Textiles, Inc.	3211	2.00
13-79-0017	Twin Aces Industries, Inc.	3521	1.10
13-79-0018	Kolora Ink and Chemical Corporation	3529	1.00
13-79-0019	Paren Trading		
13-79-0020	Hi-Tex Industrial Corporation		

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE REMOVED FROM THE SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-79-0021	Union Refinery Corp.	2221	
13-79-0022	MKK Steel Corporation	3710	4.80
13-79-0023	Cosmos Bottling Corporation	3134	44.34
13-79-0024	Maunlad Canning Corporation	3115	400.00
13-79-0025	Rose Food Product Corp.	3124	
13-79-0026	Philippine Ink Corporation	3529	
13-79-0027	Malabon Soap and Oils Ind. Corp.	3117	
13-79-0028	State Manufacturing Ind.		
13-79-0029	JVC Steam Laundry, Inc.		
13-80-0001	Rhone-Poulenc Agrochemicals Philippines, Inc.	3514	13.20
13-80-0002	Mead Johnson Philippines, Inc.	3112	1.80
13-80-0003	Monterey Farms Corporation (Cattle Farm)	1211	-
13-80-0004	Monterey Farms Corporation (Piggery)	1213	-
13-80-0005	Great Effect Enterprises Inc.	9730	
13-80-0006	Pepsi-Cola Far East Trade Dev't Co., Inc.	3134	
13-80-0007	Solid Mills, Inc.	3222	
13-80-0008	Packaging Products Corporation	3412	
13-80-0009	Metoxide Philippines Corporation	3511	
13-80-0010	Easy Grow Industries, Inc.	9730	
13-80-0011	Rohm and Haas Philippines, Inc.	3511	-
13-80-0012	Union Ajinomoto, Inc.	3511	1,650.00
13-80-0013	Unilox Industrial Corporation	3511	0.10
13-80-0014	Resins, Inc.	3511	260.00
13-80-0015	Chemphil-LMG, Inc. (Inorganic Division)	3511	
13-80-0016	Trimex Chemical Industries Corp.	3511	
13-80-0017	Polyphosphates, Inc.	3511	
13-80-0018	Superior Gas and Equipment Co., Inc. (SUGECO)	3511	160.00
13-80-0019	Consolidated Industrial Gases, Inc. (Mandaluy)	3511	
13-80-0020	Borden International Philippines, Inc.	3515	0.20

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE REMOVED FROM THE SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-80-0021	Polymer Chemicals, Inc.	3513	14.00
13-80-0022	EM-POL Corporation	3513	48.80
13-80-0023	Kemwerke, Incorporated	3513	13.30
13-80-0024	Hoechst Philippines, Inc.	3514	18.00
13-80-0025	Wrigley Philippines, Inc.	3124	0.12
13-80-0026	Fuller O'Brien Paint Co., Inc.	3521	4,410.00
13-80-0027	Nippon Paint Philippines, Inc.	3521	
13-80-0028	Dutch Boy Philippines, Inc.	3521	24.00
13-80-0029	BASF Coatings and Inks Phils. Inc.	3521	73.00
13-80-0030	Atlantic Coatings, Inc.	3521	
13-80-0031	Charter Chemicals and Coating Corporation	3521	100.00
13-80-0032	Roosevelt Chemical, Inc.	3521	
13-80-0033	BOIE Incorporated	3522	
13-80-0034	Boie-Takeda Chemicals, Inc.	3522	0.50
13-80-0035	Boots Pharmaceuticals (Phils.), Inc.	3522	1.20
13-80-0036	Merck, Inc.	3522	
13-80-0037	Bayer Philippines, Inc./Healthcare Division	3522	1.00
13-80-0038	Astra Pharmaceuticals (Phils.), Inc.	3522	
13-80-0039	Sterling Products International, Inc.	3522	3.84
13-80-0040	Abbot Laboratories (Philippines)	3522	7.89
13-80-0041	United Laboratories, Inc.	3522	443.00
13-80-0042	Warner Lambert Philippines, Inc.	3522	0.50
13-80-0043	Interphil Laboratories, Inc.	3522	-
13-80-0044	GX International, Inc	3522	
13-80-0045	Pfizer, Inc.	3522	1.00
13-80-0046	Colgate-Palmolive Philippines, Inc.	3523	364.27
13-80-0047	Johnson and Johnson (Philippines), Inc.	3523	
13-80-0048	H.B. Fuller (Philippines), Inc.	3529	0.40
13-80-0049	Resicor Enterprises, Inc.	3529	

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE REMOVED FROM THE SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-80-0050	Asian Chemical Corporation	3540	
13-80-0051	Philippine Glass Bulbs	3620	0.72
13-80-0052	Phoenix Iron and Steel Corp. (PISCOR)	3812	
13-80-0053	Pilipinas YTK Industry, Inc.	3819	
13-80-0054	Rowell Lithography and Metal Closure, Inc.	3819	7.02
13-80-0055	Philips Semiconductor Phils., Inc.	3825	41.75
13-80-0056	Pacific Semiconductors, Inc.	3825	
13-80-0057	Motorola Philippines, Inc.	3825	94.82
13-80-0058	Zilog Philippines, Inc.	3825	1.10
13-80-0059	AMI (Philippines), Inc.	3825	
13-80-0060	Amkor/Anam Pilipinas, Inc.	3825	
13-80-0061	Automated Microelectronics, Inc.	3825	
13-80-0062	Philips Consumer Products	3832	0.46
13-80-0063	Eveready Battery Company (Philis.), Inc.	3834	9.00
13-80-0064	Philips Electronics and Lighting, Inc.	3839	0.41
13-80-0065	3M Phils., Inc.	3909	
13-80-0066	Elan Pharma Phils., Inc.	6170	11.77
13-80-0067	Wellcome Philippines, Inc.	6170	0.50
13-80-0068	G. D. Searle Philippines, Inc.	6170	
13-80-0069	RP Chem. Inc.	6170	
13-80-0070	Alcon Laboratories (Phil.) Inc.	6170	500.00
13-80-0071	ARMEDIC Philippines, Inc.	6170	0.80
13-80-0072	Schering Philippine Corporation	6170	0.02
13-80-0073	Marsman and Co., Inc.	6170	20.00
13-80-0074	Upjohn Inc.	6170	1.00
13-80-0075	Rhone-Poulenc Rorer Phils., Inc.	6170	
13-80-0076	Sanofi Philippines, Inc.	6170	
13-80-0077	Boehringer Ingelheim Phils., Inc.	6170	
13-80-0078	Panelon Philippines, Inc.	3211	

ESTIMATE OF AMOUNT OF HAZARDOUS WASTE REMOVED FROM THE SITE EACH YEAR

INST_ID	INSTNAME	PSIC1	SHIP_QTY TONNES
13-80-0079	Integral Chemical Corporation	3511	
13-80-0080	GST Philippines, Inc.	3712	
13-80-0081	Philippine Worldwide Mfg. Plastic Corp.	3560	
13-80-0082	NAPOCOR - Maintenance Engineering Center	3860	182.70
13-80-0083	Allegro Microsystems Phils., Inc.	3825	2.66
13-80-0084	Epic Electronics Industries Corporation	3825	
13-80-0085	Chemphil Albright & Wilson Corp.	3511	
13-80-0086	Honda Philippines, Inc.	3846	7.56
13-80-0087	Alpolac, Incorporated	3513	0.54
13-80-0088	Astron Philippines Inc.	3832	
13-80-0089	Manila Electric Company		
13-80-0090	L.G Fernandez Plating Services		
13-80-0091	CD Electroplating and Fabrication, Inc.		
13-80-0092	American Packing Industries (Phils.) Corp.		
13-80-0093	Borden International Phils., Inc.	3513	0.20
13-80-0094	BOIE Incorporated	3522	
13-80-0095	Gelmart Industries Phils., Inc.	3210	

Table 8.8 Description of Waste Type

WS_NUMBER HAZARDOUS WASTE NUMBER	WS_NAME WASTE NAME AND DESCRIPTION
A101	Discarded plating solutions and salts with a cyanide concentration of less than 200 ppm.
A102	Discarded heat treatment solutions and salts with a cyanide concentration of less than 200 ppm.
A103	Plating solution and salts containing cyanides at a concentration exceeding 200 ppm.
A104	Heat treatment solutions and salts containing cyanides at a concentration exceeding 200 ppm.
A105	Complexed cyanide solutions and salts
A199	Other cyanide wastes arising from the plating and heat treatment industries
B201	Sulfuric acid
B202	Hydrochloric acid
B203	Nitric acid
B204	Phosphoric acid
B205	Hydrofluoric acid
B206	Mixture of sulfuric and hydrochloric acid
B207	Other inorganic acids
B208	Organic acids
B299	Other mixed acids
C301	Caustic soda
C302	Potash
C303	Alkaline cleaners
C304	Ammonium hydroxide
C305	Lime slurries
C306	Lime-neutralized metal sludges
C399	Other alkaline materials
D401	Non-toxic salts
D402	Arsenic and its compounds
D403	Boron compounds
D404	Cadmium and its compounds
D406	Lead compounds
D407	Mercury and mercuric compounds
D405	Chromium compounds
D499	Other salts and complexes
D501	Oxidizing agents

WASTE TYPE

WS_NUMBER HAZARDOUS WASTE NUMBER	WS_NAME WASTE NAME AND DESCRIPTION
D502	Reducing agents
D503	Explosive and unstable chemicals (wastes capable of detonation or explosive reaction)
D599	Highly reactive chemicals
E601	Aqueous-based
E602	Solvents-based
E699	Other mixed
F701	Flash point > 61c
F702	Flash point < 61c
F703	Chlorinated solvents and residues
G801	Animal/abattoir wastes
G802	Grease trap wastes from industrial or commercial premises
G899	Other putrescible/organic wastes
H901	Tannery wastes
H999	Other textile wastes
I101	Waste oils
I102	Interceptor sludges
I103	Vegetable oils
I104	Waste tallow
I105	Oil/water mixtures
J201	Portable containers previously containing toxic chemical substances
K301	Solidified and polymerized wastes
K302	Chemically fixed wastes
K303	Encapsulated wastes
L401	Aliphatics
L402	Aromatic and phenolics
L403	Highly odorous
L404	Surfactants and detergents
L405	Halogenated solvents
L406	Polychlorinated biphenyls and related materials
L499	Other organic chemicals
M501	Pathogenic or infectious wastes

WASTE TYPE

WS_NUMBER	WS_NAME
HAZARDOUS WASTE NUMBER	WASTE NAME AND DESCRIPTION
M502	Asbestos wastes
M503	Pharmaceutical wastes and drugs
M504	Pesticides
N807	Methanol
N511	Acetonitrile
N957	Tetrahydrofuran
N921	Pyridine
N605	Chloroform
D409	Diaphragm cell process (DCP) waste
M651	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel
N975	Trichloroethylene
N816	Methylene chloride
N776	Lead sub-acetate
M800	Sludge from the treatment of wastewater from wood preservation using creosote &/or pentachlorophenol
M740	Sludge from treatment of process wastewater and/or acid plant blow-down from primary z
N355	Sodium cyanide
N510	Acetone
N995	Xylene
N540	Benzene
N258	Nitroglycerine
	Did not report any hazardous waste materials
M701	Primary copper
E603	Inorganic pigments (sludges from chrome yellow and orange pigments)
E604	Inorganic pigments (sludges from molybdate orange pigments)
E605	Inorganic pigments (sludges from zin yellow pigments)
E606	Inorganic pigments (sludges from chrome green pigments)
E607	Inorganic pigments (sludges from chrome oxide green pigments)
E608	Inorganic pigments (sludges from iron blue pigments)
E609	Inorganic pigments (oven residue from chrome oxide green pigments)
E610	Ink formulation
D408	Brine muds

WASTE TYPE

WS_NUMBER	WS_NAME
HAZARDOUS WASTE NUMBER	WASTE NAME AND DESCRIPTION
D504	Explosive and unstable chemicals (sludges from manufacturing and processing of explosives)
D505	Explosive and unstable chemicals (spent carbon from the treatment of wastewater containing explosive
D506	Explosive and unstable chemicals (sludges from mfg, formtn and loading of lead-based initiating compd
D507	Explosive and unstable chemicals (pink/red water from TNT operations)
F704	Non-halogenated
N991	Vinyl chloride
M650	Iron and steel
N252	Nickel carbonyl

Table 8.9 Description of Storage Methods Codes

WS_STORE CODE	STOR_DESC DESCRIPTION
D	55-gallons drums
T	Storage tanks
L	Lagoon/Pond
E	Evaporation
O	Original container
G	Glass containers
C	Plastic carbouys
P	Plastic bags/polyethylene bags
B	Bottles
V	Process vessels
K	Knock-out drums
N	Open pit
J	Jute sacks/plastic sacks
A	Crates
F	Carbouys
I	Cans
H	Bags
M	Tonner bags
Q	Pails (25-liter pails)
R	Concrete storage bins
X	Stored in locked bodega
W	Septic tank
S	Steel tank
U	Open storage bodega
Y	Isolated room with atmospheric condition
Z	Boxes

Table 8.10 Description of Treatment and Disposal Methods Codes

WS_METHOD CODE	METHOD_DS DESCRIPTION
I	Incineration
L	Lagoon / pit / pond
B	Biological treatment (e.g. activated sludge)
C	Composting
D	Dumping / landfill / burial
S	Sold to interested entities / supplier
H	Physico-chemical (e.g. neutralization, ppt'n)
R	Irrigation
T	Returned to / removed by supplier
A	Hauling by a contractor / off-site treatment / disposal
W	Recycling / reuse / recovery
F	For future processing
O	For sale
E	Refined thru distillation / solvent recovery
U	Dilution (water or air)
Z	Sterilization
N	Flare burning
X	Weathering
M	Land farming
P	Sea/ocean disposal
G	Concreting (immobilization)
J	Double-bagging and burying in ashpond
K	Co-disposal in ashpond
Q	Cooking / rendering
Y	Evaporation / venting to the atmosphere
V	Used as fuel
\$	Reinjection
&	Oil / water separation
@	Gravity / mechanical separation
#	Scrubbing (venturi, biological or water)
%	Aeration
*	Used as animal feed supplement / ingredient
+	Drying (solar, mechanical, etc.)
	Exported / marketed abroad
=	Waste exchange
ñ	Regeneration
?	Electrochemical treatment
^	Municipal garbage collector
\	Chemical treatment

Table 8.11 Description of Units used in the Tables

UNITS	UNIT_DESC
<i>CODE</i>	<i>DESCRIPTION</i>
T	Tonnes
KGS	Kilograms
LI	Liters
G	Gallons
LBS	Pounds
CUM	Cubic Meters
GRM	Grams
ST	Short tons
BAR	Barrels
BBL	bbls
CYL	Cylinder mass
PCS	Pieces
MG	Milligram
BAG	Bags

CHAPTER 9

INVENTORY SURVEY OF SOLID WASTE EQUIPMENT AND FACILITIES



9. INVENTORY SURVEY OF SOLID WASTE EQUIPMENT, FACILITIES AND ORGANIZATION

An inventory on solid waste equipment, facilities and organization is essential in understanding present conditions and the solid waste management capabilities of the MMDA, LGUs and private contractors. Thus, a survey was conducted from April 28 to May 31, 1997.

9.1 Objectives of the Survey

The survey aims to:

- Prepare a complete inventory on equipment, their total collection capacity and condition at the time of the survey.
- Prepare a complete inventory on facilities, type of facilities, location, capacity and ownership.
- Determine the LGUs and private contractors' capability to maintain equipment.
- Determine total number of personnel and organizations involved in solid waste management.

9.2 Scope of the Survey

The survey covered:

- Ten cities of Metro Manila, namely, Manila, Pasay, Quezon, Caloocan, Marikina, Muntinlupa, Pasig, Makati, Mandaluyong and Las Piñas.
- Seven municipalities of San Juan, Pateros, Malabon, Navotas, Valenzuela, Taguig, and Parañaque.
- Thirty six private hauling companies contracted by the LGUs.
- Metro Manila Development Authority, which provides collection and street sweeping support for LGUs, maintains the Las Pinas Transfer Station and operates two sanitary landfill disposal sites at San Mateo, Rizal and Carmona, Cavite.

The inventory of the following was completed for each LGU/Company:

- Equipment (collection and haulage, transfer, and final disposal)
 - Plate and body no.
 - Type and loading capacity
 - Engine status (whether *good*, or needing *minor* or *major repair*)
 - Body status (whether *good*, *fair* or *poor*)
 - Model (or *year of manufacture*)
 - Status when acquired (whether *second hand*, *reconditioned* or *new*)
- Facilities (depot and maintenance, transfer, and final disposal)
 - Type of facility
 - Location or address
 - Capacity or land area
 - Ownership (owned or rented)

In the case of transfer facilities, the survey indicated the following type of transfer:

- by *stage type*, where the collection vehicle goes up an elevated stage and the load is transferred to another equipment under the stage;
- by *payloader*, where waste is first unloaded to an open heaping area and reloaded to a bigger hauling vehicle by shovel or payloader;
- by *mini-dump trucks to a larger vehicle* or compactor, or stationary containers picked up by trucks or trailer vans;
- by *collection vehicle to compactor trailer van* (as in the Las Piñas Transfer Station).

In the case of depots and garages, the survey indicated whether the individual LGU and/or the private contractors under them are capable of equipment maintenance (i.e., undertake minor or major engine repair or body repair work).

- Organization

- Deployment
 - Administration
 - Operations (regular)
 - Collection
 - Beautification
 - Depot, maintenance, motorpool
 - Transfer station
 - Dumpsite operation
 - MMDA back-up
 - Special project/operation
- Type of Personnel
 - Supervisor (head or assistant, managerial level)
 - Technical staff
 - Administrative staff
 - Clerical staff
 - Operations officer
 - Operations staff
 - Monitoring staff
 - Inspector
 - Driver
 - Garbage collector (palero, helper, laborer)
 - Street sweeper
 - Engineer
 - Mechanic
 - Heavy equipment operator
 - Dispatcher
 - Environmental enforcers

9.3 Methodology

Questionnaires were developed for the conduct of the following inventory surveys:

- Equipment Survey
- Facilities Survey
- Organization Survey

Facsimiles of these survey questionnaires are attached in the end of this chapter. The survey was then conducted through the following process:

- **Notification.** Letters were sent to the mayors (local chief executives), reminding them about the project and the preliminary studies needed for master planning, and requesting their assistance to facilitate the conduct of the survey. The area managers were also furnished copies of these communications.
- **Orientation.** The area managers and their representatives were oriented on the purpose and use of the survey instruments.
- **Accomplishment of the Survey Instruments.** The staff of the LGUs and private companies answered the questionnaires. The survey staff visited the offices of the area managers and the private contractors.
- **Submission of Answered Questionnaires.** The area managers of LGUs and the operations managers of private companies reviewed the questionnaires before submitting them to the survey staff.
- **Tabulation.** The results of the survey were tabulated and the figures were reviewed for consistency. Missing or wrong data were cleared with the area managers and the knowledgeable MMDA staff.
- **Preparation of the Report.** The results were consolidated into this report.

9.4 Results

9.4.1 Equipment Inventory

Type and Loading Capacity of Equipment

The equipment utilized for waste collection and haulage are generally of two types:

- Closed compactor vehicles (C5, C8, C12, C15 and special compactors)
- Open dump trucks (6 wheeler, 10 wheeler, and mini-dump trucks)

The reported loading capacities of these equipment vary due to the following factors:

- Different manufacturing specifications
- Modifications to the containers by local haulers
- Compaction efficiency of the equipment
- Different ocular estimates of the contractors
- Compliance with the minimum volume requirements of LGU

The compactor vehicles have the following capacities:

- 1) C5 - 5-8 m³
- 2) C8 - 8-12 m³
- 3) C12 - 12-16 m³
- 4) C15 - 15-24 m³
- 5) Special Compactors - 40-72 m³

The dump trucks, on the other hand, have the following range of capacities:

- 1) 6 wheeler dump trucks - 10-12 m³
- 2) 10 wheeler dump trucks - 15-18 m³
- 3) Mini-dump trucks - 8 m³ or less

The type and quantity of equipment by city/municipality are shown in Table 9.1.

A total of 1,303 operational vehicles/equipment (excluding non-serviceable units and those undergoing major repairs) are used for collection and haulage. These consist of 274 compactors and 1,029 dump trucks, *including 32 vehicles registered in more than one city/municipality*. Of the total equipment inventory, the MMDA owned 47 units (3.6 %), while the 17 LGUs accounted for 165 units (12.7 %). The private contractors hold the remaining 1,091 units (83.7 %).

Table 9.1. Type and Quantity of Equipment by LGU

LGU	Compactors					Dump Trucks			Total
	C5	C8	C12	C15	Special	6 W	10 W	Mini	
Manila	9	24	0	0	60	7	123	0	223
Quezon City	3	7	2	0	15	59	182	12	280
Makati	0	3	0	1	0	65	90	0	159
Pasay	4	2	0	0	0	28	15	0	49
Muntinlupa	1	2	0	0	0	29	0	0	32
Mandaluyong	0	2	0	0	0	29	54	0	85
Parañaque	0	0	0	0	8	0	26	2	36
Las Piñas	10	20	0	0	0	0	0	0	30
Marikina	13	2	0	0	0	0	0	0	15
Pasig	6	0	0	4	4	0	74	11	99
Pateros	3	3	0	1	0	0	0	2	9
San Juan	0	0	0	0	15	1	12	6	34
Taguig	0	0	1	0	0	1	18	1	21
Caloocan	0	0	0	2	0	5	54	45	106
Malabon	1	3	0	0	0	24	1	2	31
Navotas	0	0	0	0	0	3	9	10	22
Valenzuela	0	0	0	0	0	0	7	18	25
MMDA	7	22	0	13	1	0	4	0	47
TOTAL	57	90	3	21	103	251	669	109	1303

Note: 6 W – six wheeler dump trucks; 10 W – 10 wheeler dump trucks;

Mini – Mini-dump trucks

The number of waste collection equipment by ownership is presented in Table 9.2 below.

Table 9.2. Waste Collection equipment BY ownership

LGU	MMDA or LGU Equipment (No.)	Private Equipment (No.)	Total
Manila	5	218	223
Quezon City	6	274	280
Makati	3	156	159
Pasay	6	43	49
Muntinlupa	3	29	32
Mandaluyong	7	78	85
Paranaque	8	28	36
Las Pinas	30	0	30
Marikina	15	0	15
Pasig	40	59	99
Pateros	9	0	9
San Juan	7	27	34
Taguig	3	18	21
Caloocan	2	104	106
Malabon	7	24	31
Navotas	14	8	22
Valenzuela	0	25	25
MMDA	47	0	47
TOTAL	212	1091	1303

Table 9.3 shows the estimated equipment capacity per trip. The estimated total loading capacity of the 1,303 collection and haulage vehicles is 21,914.7 m³. (*Note: Differences in decimal points are due to rounding off.*) The compactors account for 7,447.4 m³. (34.0%) of the load, while the dump trucks carry 14,467.3 (66.0 %) of the waste. The MMDA accounted for 715.6 m³ (3.3%), while the 17 cities and municipalities had a combined carrying capacity of 21,199.1 m³. (96.7 %).

Table 9.3. Estimated. Equipment Capacity PER TRIP by LGU

(unit: cm³)

LGU	Compactors					Dump Trucks			Total
	C5	C8	C12	C15	Special	6 W	10 W	Mini	
Manila	72	330.0	0	0	2,412	70	2,139.0	0	5,023.0
Quezon City	24	79.6	32	0	1,078	592	2,912.0	94	4,811.6
Makati	0	33.6	0	24	0	712	1,386.0	0	2,155.6
Pasay	20	16.0	0	0	0	335	304.5	0	675.5
Muntinlupa	5	25.6	0	0	0	435	0	0	465.6
Mandaluyong	0	24.0	0	0	0	337	744.8	0	1,105.8
Paranaque	0	0	0	0	579	0	390.0	12	981.0
Las Pinas	60	240.0	0	0	0	0	0	0	300.0
Marikina	69	24.0	0	0	0	0	0	0	93.0
Pasig	30	0	0	88	290	0	1,292.0	55	1,755.0
Pateros	18	36.0	0	24	0	0	0	5	83.0
San Juan	0	0	0	0	1,078	10	228.0	36	1,352.0
Taguig	0	0	20	0	0	10	270.0	6	306.0
Caloocan	0	0	0	30	0	50	906.0	360	1,346.0
Malabon	5	25.0	0	0	0	232	16.0	10	288.0
Navotas	0	0	0	0	0	30	144.0	35	209.0
Valenzuela	0	0	0	0	0	0	105.0	144	249.0
MMDA	42	281.6	0	312	20	0	60.0	0	715.6
TOTAL	345	1,115.4	52	478	5,547	2,813	10,897.3	757	21,914.7

Table 9.4 shows the breakdown of equipment carrying capacity of the MMDA, the LGUs and the private contractors, by city/municipality.

Table 9.4. Equipment Carrying Capacity of MMDA, LGUs and Private Contractors by City/Municipality

City/Municipality	Capacity (m ³)		Total
	MMDA or LGU	Private	
Manila	53.0	4970.0	5023.0
Quezon City	61.6	4750.4	4812.0
Makati	49.6	2106.0	2155.6
Pasay	36.0	639.1	675.1
Muntinlupa	30.6	435.0	465.6
Mandaluyong	80.0	1025.6	1105.6
Paranaque	102.0	878.6	980.6
Las Pinas	300.0	0	300.0
Marikina	93.0	0	93.0
Pasig	496.0	1259.4	1755.4
Pateros	83.0	0	83.0
San Juan	46.0	1306.4	1352.4
Taguig	36.0	270.0	306.0
Caloocan	30.0	1316.0	1346.0
Malabon	58.0	230.0	288.0
Navotas	81.0	128.0	209.0
Valenzuela	0	249.0	249.0
MMDA	715.6	0	715.6
TOTAL	2351.4	19563.5	21914.9

The MMDA and the 17 cities and municipalities have a combined carrying capacity of 2,351.4 m³ (10.7%), while private contractors have a total carrying capacity of 19,563.5 m³ (89.3 %).

Present Condition, Model, and Status of Equipment When Acquired

Table 9.5 shows the present condition, model and status of the equipment when acquired. The majority of the 1,303 operational collection and haulage vehicles is in good condition -- 87 % of the engine is in good condition, while 13 % need minor repair. On the other hand, 73 % of the body is in good shape.

Of the total 1,403 vehicles (including 76 units needing major repair and 24 non-serviceable), the year of manufacture of 476 units (34.09 %) is not known. Those manufactured within the last six years (from 1991-1995) total 472 units (33.6 %), over six but not more than 10 years old consist of 262 units (18.7 %), over 10 but not more than 15 years old, 114 units (8.1 %), and over 15 but not more than 20 years old, 25 units (1.8 %). Only 54 vehicles (3.8 %) are older than 20 years.

Of the 1,403 equipment, 640 were bought reconditioned, 376 new, and 343 second hand. The symbols used in the succeeding tables (Tables 9.5, 9.6-A, 9.6-B) have the following meanings:

Engine condition	good	G
	needing minor repair	Min
	needing major repair	Maj
Body condition	good	G
	fair	F
	poor	P
Model or year of manufacture	1991-95	A
	1986-90	B
	1981-85	C
	1976-80	D
	more than 20 years	E
	unknown	F
Status when acquired	second hand	S
	reconditioned	R
	new	N

Table 9.5. Present Condition, Model, and Status of Equipment When Acquired

LGU	CONDITION						MODEL OR YEAR OF MANUFACTURE						STATUS WHEN ACQUIRED		
	ENGINE			BODY			A	B	C	D	E	F	S	R	N
	G	Min	Major	G	F	P									
Manila	210	13	10	148	81	4	133	53	39	8	0	0	53	26	154
Quezon City	242	38	4	227	46	11	28	2	0	0	0	254	42	213	29
Makati	148	11	5	107	53	5	45	39	7	7	31	36	79	77	9
Pasay	44	5	0	49	0	0	0	6	43	0	0	0	34	13	2
Muntinlupa	29	3	0	33	0	6	5	34	0	0	0	0	17	0	22
Mandaluyong	80	5	4	80	9	0	11	0	0	0	0	78	35	43	11
Parañaque	36	0	2	36	0	2	28	10	0	0	0	0	2	8	28
Las Piñas	30	0	0	30	0	0	30	0	0	0	0	0	0	30	0
Marikina	12	3	24	17	23	0	21	0	0	0	0	19	0	35	5
Pasig	76	23	6	93	11	4	48	5	4	3	0	48	24	63	21
Pateros	5	4	0	3	6	1	6	4	0	0	0	0	0	0	10
San Juan	31	3	3	33	3	1	24	9	4	0	0	0	0	14	23
Taguig	18	3	0	18	3	3	6	0	0	0	18	0	0	19	5
Caloocan	106	0	0	70	36	1	37	38	15	7	5	5	25	82	0
Malabon	29	2	1	12	19	1	7	0	1	0	0	24	24	5	3
Navotas	21	1	2	14	8	2	12	0	0	0	0	12	8	4	12
Valenzuela	25	0	0	25	0	0	25	0	0	0	0	0	0	25	0
MMDA	36	11	15	0	50	19	6	62	1	0	0	0	0	0	69
TOTAL	1178	125	76	995	348	60	472	262	114	25	54	476	343	657	403

The inventory found 100 vehicles to be non-operational, of which 76 units are undergoing major repair and 24 non-serviceable. The following areas have non-serviceable units: Makati (1), Muntinlupa (7), Marikina (1), Pasig (3), Pateros (1), Taguig (3), Caloocan (1), and MMDA (7).

Tables 9.6 shows the distribution of equipment by condition, model and status, per LGU and private contractor.

Table 9.6-A. Present Condition, Model, and Status of Equipment When Acquired, per LGU

LGU	CONDITION						MODEL OR YEAR OF MANUFACTURE						STATUS WHEN ACQUIRED		
	ENGINE			BODY											
	G	Min	Maj	G	F	P	A	B	C	D	E	F	S	R	N
MANILA	210	13	10	148	81	4	133	53	39	8			53	26	154
LGU	5			5				3	2				5		
Private	205	13	10	143	81	4	133	50	37	8			48	26	154
QUEZON CITY	242	38	4	227	46	11	28	2				254	42	213	29
LGU	6			6			1	2				3	2	3	1
Private	236	38	4	221	46	11	27					251	40	210	28
MAKATI	148	11	5	107	53	5	45	39	7	7	31	36	79	77	9
LGU	3		3	1	2	4		7					7		
Private	145	11	2	106	51	1	45	32	7	7	31	36	72	77	9
PASAY	44	5		49				6	43				34	13	2
LGU	5	1		6				6						4	2
Private	39	4		43					43				34	9	
MUNTINLUPA	29	3		33		6	5	34					17		22
LGU	3			4		6	2	8					8		2
Private	26	3		29			3	26					9		20
MANDALUYONG	80	5	4	80	9		11					78	35	43	11
LGU	2	5	4	2	9		11					78			11
Private	78			78									35	43	
PARAÑAQUE	36		2	36		2	28	10					2	8	28
LGU	8		2	8		2		10					2	8	
Private	28			28			28								28
LAS PIÑAS (LGU)	30			30			30							30	
MARIKINA (LGU)	12	3	24	17	23		21					19		35	5
PASIG	76	23	6	93	11	4	48	5	4	3		48	24	63	21
LGU	25	15	6	36	10	3	40					9		35	14
Private	51	8		57	1	1	8	5	4	3		39	24	28	7
PATEROS (LGU)	5	4		3	6	1	6	4							10
SAN JUAN	31	3	3	33	3	1	24	9	4					14	23
LGU	7		1	8			8								8
Private	24	3	2	25	3	1	16	9	4					14	15
TAGUIG	18	3		18	3	3	6				18			19	5
LGU		3			3	3	6							1	5
Private	18			18							18			18	
CALOOCAN	106			70	36	1	37	38	15	7	5	5	25	82	
LGU	2			2		1		3					3		
Private	104			68	36		37	35	15	7	5	5	22	82	
MALABON	29	2	1	12	19	1	7	0	1			24	24	5	3
LGU	7			7								7	2	5	
Private	22	2	1	5	19	1	7		1			17	22		3
NAVOTAS	21	1	2	14	8	2	12					12	8	4	12
LGU	14			14			10					4		4	10
Private	7	1	2		8	2	2					8	8		2
VALENZUELA (PC)	25			25			25							25	0
MMDA	36	11	15		50	19	6	62	1						69
TOTAL	1178	125	76	995	348	60	472	262	114	25	54	476	343	657	403

Table 9.6-B. Present Condition, Model, and Status of Equipment When Acquired by LGU, MMDA and private contractor

	CONDITION						MODEL OR YEAR OF MANUFACTURE						STATUS WHEN ACQUIRED		
	ENGINE			BODY											
	G	Min	Maj	G	F	P	A	B	C	D	E	F	S	R	N
LGU and MMDA	170	42	55	149	103	39	141	105	3	0	0	42	29	125	137
Private Contractors	1008	83	21	846	245	21	331	157	111	25	54	434	314	532	266
TOTAL	1178	125	76	995	348	60	472	262	114	25	54	476	343	657	403

Transfer, Disposal and Other Equipment

Other equipment utilized for transfer, final disposal and other related solid waste management functions include the following:

- Transfer Equipment:
 - Trailer Van (TV)
 - Bulldozer (BD)
 - Payloader (PL)
 - Backhoe (BH)
 - Grader (G)
 - Prime Mover (PM)
 - Water Tank (WT)
 - Others (motorized sprayer, etc.)
- Final Disposal:
 - Bulldozer (BD)
 - Payloader (PL)
 - Trash Compactor (TC)
 - Backhoe (BH)
 - Water Tank (WT)
 - Dump truck (DT)
 - Others (motor sprayer, fogging machine, generator, trash compactor)
- Street Sweeping:
 - Mechanical Street Sweeper (SS)
 - Sewer Jet (SJ)
 - Water Tank (WT)
 - Trash Bin (TB)
 - Others (generator, chain saw, mini jackhammer, etc.)

Table 9.7 shows the type of other equipment used by LGUs and private companies for transfer, disposal and related solid waste management functions.

Table 9.7. Type and Quantity of Other Equipment by LGU

LGU	TRANSFER							DISPOSAL							OTHER EQUIPMENT				
	TV	BD	PL	BH	PM	WT	O	BD	PL	TC	BH	WT	DT	O	SS	SJ	WT	TB	O
Manila	32		6	3		1	1								7				2
Quezon City								9	1	3	1				2	1	2		
Makati																			
Pasay			2																
Muntinlupa																	1		
Mandaluyong																			
Parañaque	5	1	3	2														200	
Las Piñas																			
Marikina																			
Pasig			3																
Pateros																			
San Juan			1																
Taguig			1	1													2		
Caloocan		3	7												3				
Malabon			1																
Navotas			1																
Valenzuela		1	1																
MMDA Las Pinas T. S.	15	1	1		15				1										
MMDA San Mateo SLF								7	1	2		1		3					
MMDA Carmona SLF								7	1	2	1	1	4	3					
TOTAL	52	6	27	6	15	1	1	23	4	7	2	2	4	6	12	1	5	200	2

Note: TV – Trailer Van; BD – Bulldozer; PL – Payloader; BH – Backhoe; G – Grader;
 PM – Prime Mover; WT – Water Tank; TC – Trash Compactor; DT – Dump Truck;
 SS – Mechanical Street Sweeper; SJ – Sewer Jet; TB – Trash Bin; O – Others

The Las Piñas Transfer Station utilizes 15 units of trailer vans, while Manila and Parañaque have 32 and five units of trailer vans, respectively. A trailer van has an average capacity of 85 m³.

Twelve LGUs (and private contractors under their employ) use other equipment, such as bulldozers, payloaders, graders, etc. for individual transfer systems, disposal, and related solid waste functions:

1. Manila
2. Quezon City
3. Pasay
4. Muntinlupa
5. Parañaque
6. Pasig
7. San Juan
8. Taguig
9. Caloocan
10. Malabon
11. Navotas
12. Valenzuela

Ten wheeler dump trucks are also utilized by some private companies as transfer equipment, to reload the waste from smaller vehicles in order to economize on trips to the dump site.

9.4.2 Inventory of Facilities

An inventory on the following facilities for collection, transfer and disposal was conducted:

- Depot or garages
- Maintenance shops
- Transfer stations (including individual transfer stations operated by some LGUs and private companies)
- Disposal sites (both open dump sites and sanitary landfills)

The inventory determined the following:

- Type of facility
- Land area
- Ownership
- General supervision, management and maintenance of the facility

Transfer facilities are of four types, namely: (1) by stage, (2) by payloader, (3) by smaller to a larger reloading vehicle, and (4) by compactor trailer van.

Depot, Garage and Maintenance Shop

Table 9.8 shows the depots and maintenance shops of LGUs.

Table 9.8

LGU Depots and Maintenance Shops

LGU	Depot or Garage			Maintenance Shop								
	Land Area (km ²)	Ownership		Land Area (km ²)	Ownership		Maintenance Capability					
							Engine			Body		
		O	R		O	R	N	Min	Maj	N	Min	Maj
Manila							1			1		
Quezon	16,000	1		same	1			1			1	
	320	1					1			1		
Makati	3,000	1					1			1		
Pasay				300	1		1			1		
Muntinlupa	200		1	same	1			1			1	
Mandaluyong	300	1					1			1		
Parañaque	3,000	1					1			1		
Las Piñas		1					1			1		
Marikina	13,550	1					1			1		
Pasig	8,000	1		same	1				1			1
Pateros	1,500		1	same	1			1		1		
San Juan	1,000	1					1			1		
Taguig		1					1			1		
Kalookan	5,000		1					1			1	
Malabon							1			1		
Navotas							1			1		
Valenzuela							1			1		
MMDA	1,000	1		same	1			1			1	
	200	1		same	1			1			1	
Total	53,070	12	3		7		14	6	1	15	5	1

The MMDA maintains two depots and garage with integrated maintenance shops that perform minor engine and body repairs.

Manila, Pasay, Las Piñas, Taguig, Malabon, Navotas and Valenzuela do not have any depot or garage. Only Quezon, Pasay, Muntinlupa, Pasig, and Pateros have their own maintenance shops. Of the five LGUs, only Pasig has the capability for major engine and body repairs.

Except for Las Piñas, Marikina and Pateros, all LGUs employ private companies who have their own garage and maintenance shops. These private companies can undertake major engine and body repair work.

Transfer Stations

The MMDA owns the only collective transfer station of Metro Manila, which is located at Las Piñas.

Table 9.9. Collective Transfer Station

Name of Facility	Service Area	Location	Area (km ²)	Own		Ops		Maint		Sup	
				G	P	G	P	G	P	G	P
Las Piñas Transfer Station	Las Piñas, Parañaque, Muntinlupa, Pasay, Makati	Las Piñas City	20,000	1		1		1		1	

Note: **Own** – Ownership; **Ops** – Operations; **Maint** – Maintenance; **Sup** – Supervision; **G** – Government; **P** – Private

The Las Piñas Transfer Station serves Las Piñas, Makati, Muntinlupa, Parañaque, Pasay and Taguig. The MMDA has privatized the operation and maintenance of the facility.

Table 9.10. Individual Transfer Stations

LGU	Service Area	Location(s)	Area (km ²)	Own		Ops		Maint		Sup	
				G	P	G	P	G	P	G	P
TYPE A: STAGE TYPE											
Pasig	Pasig City	Kaniyugan, Pasig	8,000	1		1		1		1	
Marikina	Marikina	Sta. Elena, Marikina	550	1		1		1		1	
Sub-Total			8,550	2		2		2		2	
TYPE B: BY PAYLOADER											
Manila	Manila, Navotas, and northern LGUs	• C-4, R-10, Tondo	1,500	1		1		1		1	
		• Pier 2 North Harbor	2,000	1		1		1		1	1
Malabon	Malabon, Caloocan and northern LGUs	• C-3 Dagat-dagatan	10,000		1		1		1		1
		• Acacia	1,000		1		1		1		1
Valenzuela	Valenzuela	Hi-way, Paso de Blas	200		1		1		1		1
Parañaque	Parañaque	Palanyag 400 Base	1,000	1		1			1	1	
Pasay	Pasay City	Reclamation Area	800		1		1		1		1
Caloocan	Caloocan City	C-3 Old Caltex	550		1		1		1		1
Sub-Total			17,050	3	5	2	6	1	7	2	6
TYPE C: BY LARGER RELOADING VEHICLES											
Caloocan	Caloocan City	• Himlayan Road	15,000		1		1		1		1
		• Tirad Pass cor.	600		1		1		1		1
		• Malvar	2,000		1		1		1		1
		• Santiago									
Malabon	Malabon and Navotas	Maysilo, Malabon	8,000		1		1		1		1
Sub-Total			25,600		4		4		4		4
GRAND TOTAL			51,200	5	9	4	10	3	11	4	10

Note: **Own** – Ownership; **Ops** – Operations; **Maint** – Maintenance; **Sup** – Supervision; **G** – Government; **P** – Private

Five LGUs and nine private contractors operate a total of 14 individual transfer stations. The types of individual transfer stations by LGU are as follows:

- Type A (by stage): Pasig and Marikina
- Type B (by payloader): Manila, Malabon, Valenzuela, Parañaque, Pasay, and Caloocan
- Type C (by larger reloading vehicles): Caloocan and Malabon

Private contractors operate 10 of the 14 transfer facilities, 11 of which are maintained privately. The government, however, maintains general supervision over 10 of the facilities.

Disposal Sites

Table 9.11 lists the final disposal sites of Metro Manila.

Table 9.11. Final Waste Disposal Sites

FACILITY	Location (or Address)	Service Areas	Capacity (km ²)	Own		Ops		Maint		Sup	
				G	P	G	P	G	P	G	P
Payatas dump site	Payatas, QC	Quezon City, NCR	200,680		1	1			1	1	
San Mateo SLF	San Mateo, Rizal	NCR and adjoining towns	730,000	1			1		1	1	
Carmona SLF	Carmona, Cavite	NCR and adjoining towns	659,000	1			1		1	1	
Catmon dump site	Malabon	Malabon	18,000		1		1		1	1	
TOTAL DISPOSAL SITES			1,607,680	2	2	2	3		4	4	

Note: **Own** – Ownership; **Ops** – Operations; **Maint** – Maintenance; **Sup** – Supervision; **G** – Government; **P** – Private

The MMDA owns and supervises the sanitary landfill sites at San Mateo, Rizal and Carmona, Cavite, while the two open dump sites at Payatas, Quezon City and Catmon, Malabon are privately owned.

9.4.3 Organization

A total of 14,623 personnel are involved in solid waste management. The LGUs account for 8,420 people (57.6 %), while the private contractors employ 6,203 (or 42.4 %).

The number of LGU personnel by functional deployment is shown in Table 9.12.

Table 9.12. LGU Personnel Deployment by Function

LGU	Adm	Ops	Coll		Beau		DMM	TS	Dump	MMDA	SP	TOTAL
			D	C	Sw	O						
Manila	51	36	0	0	189	0	3	0	0	0	0	279
Quezon City	48	98	0	15	32	82	0	0	16	524	94	909
Makati	37	48	0	91	243	11	1	0	0	0	35	466
Pasay	1	9	4	8	20	0	0	0	0	0	0	42
Muntinlupa	19	12	0	9	57	16	8	0	0	0	670	791
Mandaluyong	11	2	11	12	272	0	0	0	0	0	0	308
Parañaque	20	12	21	0	225	0	2	4	0	0	0	284
Las Piñas	16	0	42	84	565	0	8	0	0	0	0	715
Marikina	8	38	50	150	60	0	4	0	0	0	0	310
Pasig	9	16	38	150	420	0	2	4	0	0	0	639
Pateros	4	0	5	21	33	0	2	0	0	0	0	65
San Juan	4	3	7	0	26	0	0	0	0	0	0	40
Taguig	16	33	4	12	129	0	1	0	0	0	0	195
Caloocan	14	6	0	0	207	0	0	0	0	0	0	227
Malabon	5	7	15	20	60	25	0	0	8	7	0	147
Navotas	1	4	0	0	15	0	2	0	0	0	0	
Valenzuela	3	7	8	24	41	0	2	0	0	0	0	85
MMDA-PMO/SWMTF	27	17	0	0	0	0	0	0	0	0	0	44
MMDA-ESC	0	0	0	0	0	2,416	0	0	0	0	324	2,740
MMDA-San Mateo LSF	0	0	0	0	0	0	0	0	11	0	0	11
Las Piñas-TS	0	0	0	0	0	0	0	5	0	0	0	5
MMDA-Carmona LSF	0	0	0	0	0	0	0	0	8	0	0	8
MMDA-107	2	0	29	0	0	0	0	0	0	0	0	31
MMDA-103	25	39	8	0	0	0	0	0	0	0	0	72
Total	321	387	242	596	2,594	2,550	35	13	43	531	1,123	8,435

Note: **Adm** – Administration; **Ops** - Operations (Regular); **Coll** – Collection; **Beau** – Beautification; **DMM** - Depot, Maintenance, Motorpool; **TS** - Transfer Station; **Dump** - Dump Site Operation; **MMDA** - MMDA Back-up; **SP** - Special Project/Operation; **D** – Driver; **C** – Collector; **Sw** – Street sweepers; **O** – Others (i.e., grass cutters, etc.)

Private contractors employ 6,203 personnel, with *Collection* absorbing the lion's share of 5,235 workers (84.4 %).

Table 9.13. Collection and Beautification: Private Personnel

Private Contractor	Collection			Beautification			Total
	D	C	ST	SW	O	ST	
Manila: Leonel	240	699	939	250	0	250	1,189
Quezon City							
REN-Q.C.	200	1,000	1,200	0	0	0	1,200
TRANSTAR	0	0	0	0	0	0	
HALREY	40	139	179	0	0	0	179
GREENLINE-E	33	230	263	0	0	0	263
NIDC	8	24	32	0	0	0	32
LRP	17	59	76	0	0	0	76
Caloocan							
MUD-REGAL	22	78	100	0	0	0	100
LDM	18	7	25	0	0	0	25
R&F	7	5	12	0	0	0	12
ETS	5	12	17	0	0	0	17
HALREY	13	43	56	0	0	0	56
EDC	27	60	87	0	0	0	87
FELGENE	12	43	55	0	0	0	55
Malabon							
HAULERS	10	33	43	0	0	0	43
MPH	5	15	20	0	0	0	20
Valenzuela: HALREY	20	66	86	0	0	0	86
Navotas: HAULERS	12	52	64	0	0	0	64
Pasig							
REDFOX	5	20	25	0	0	0	25
METROWIDE E	7	28	35	0	0	0	35
IPM	10	40	50	0	0	0	50
RB YAP	4	16	20	0	0	0	20
B.BAL	4	16	20	0	0	0	20
TUAZON	5	20	25	0	0	0	25
METROWIDE M	14	56	70	0	0	0	70
SVR	1	4	5	0	0	0	5
JRD	9	36	45	0	0	0	45
EER	3	12	15	0	0	0	15
Makati							
ACY	39	125	164	0	0	0	164
JSDG	24	96	120	0	0	0	120
NJ BAUTISTA	22	88	110	0	0	0	110
RTM	24	79	103	0	0	0	103
REN	32	128	160	0	0	0	160
Mandaluyong							
LEG H	41	117	158	0	0	0	158
RMMS	78	312	390	0	0	0	390
Parañaque							
EJR	20	80	100	0	0	0	100
GREENLINE E	33	180	213	0	0	0	213
HINTERLAND	5	20	25	0	0	0	25
Muntinlupa: REDFOX	28	100	128	0	0	0	128
TOTAL	1,097	4,138	5,235	250	0	250	5,485

Note: D – Driver; C – Collector; Sw – Street sweepers; O – Others (i.e., grass cutters, etc.)

9.5 Summary of Findings

Number of Collection Vehicles

Metro Manila has a total of 1,303 operational collection vehicles, broken down as follows:

	<i>No. of Units</i>	<i>Percentage</i>
MMDA	47	3.6
LGUs	165	12.7
Private Contractors	1,091	83.7

Type of Collection Vehicles

The equipment utilized for waste collection and haulage are generally of two types:

	<i>No. of Units</i>	<i>Percentage</i>
Compactors	274	21.0
Open Dump Trucks	1029	79.0

Carrying Capacity of Collection Vehicles

The combined carrying capacity per trip of all the vehicles is estimated at 21,200m³ approximately.

- **Total Disposal Volume**
The total disposal volume is estimated at 14,500 m³ approximately.
- **Required Average Number of Trips per Day per LGU**
Based on the above estimates, the average required number of trips per LGU is presented in Table 9.14:

Table 9.14 Average Required Number of Trips

LGU	Waste Collection Volume	Carrying Capacity	Required Ave. No. of Trips
Manila	2,703	5,023.0	0.54
Quezon	3,078	4,812.0	0.64
Makati	1,005	2,155.6	0.47
Pasay	1,259	675.1	1.87
Muntinlupa	1,000	465.6	2.15
Mandaluyong	696	1,105.6	0.63
Parañaque	603	980.6	0.61
Las Piñas	870	300.0	2.90
Marikina	372	93.0	4.00
Pasig	903	1,755.4	0.51
Pateros	63	83.0	0.76
San Juan	42	1,352.4	0.03
Taguig	359	306.0	1.17
Caloocan	515	1,346.0	0.38
Malabon	328	288.0	1.14
Navotas	150	209.0	0.72
Valenzuela	548	249.0	2.20
TOTAL	14,494	21,199.3	0.68

Collection Capacity Per Trip of the MMDA, LGUs and Private Contractors

	m³	Percentage
MMDA	715.6	3.2
LGUs	1635.8	7.5
Private Contractors	19563.5	89.3

The collection capacity (m³) by city/municipality is presented in Table 9.15.

Table 9.15 Collection Capacity in Each City/Municipality

<i>City/Municipality</i>	<i>Capacity (m³)</i>		<i>Total</i>
	<i>MMDA or LGU</i>	<i>Private</i>	
Manila	53.0	4970.0	5023.0
Quezon City	61.6	4750.4	4812.0
Makati	49.6	2106.0	2155.6
Pasay	36.0	639.1	675.1
Muntinlupa	30.6	435.0	465.6
Mandaluyong	80.0	1025.6	1105.6
Parañaque	102.0	878.6	980.6
Las Piñas	300.0	0	300.0
Marikina	93.0	0	93.0
Pasig	496.0	1259.4	1755.4
Pateros	83.0	0	83.0
San Juan	46.0	1306.4	1352.4
Taguig	36.0	270.0	306.0
Caloocan	30.0	1316.0	1346.0
Malabon	58.0	230.0	288.0
Navotas	81.0	128.0	209.0
Valenzuela	0	249.0	249.0
MMDA	715.6	0	715.6
TOTAL	2351.4	19563.5	21914.9

Condition of Vehicles

- Engine: 90.4 % of the engines of all 1,303 operational vehicles are in good condition
- Body: 76.4 % of the bodies of the same vehicles are in good condition

Model or Year of Manufacture

The inventory, which includes non-serviceable vehicles and those needing major repairs, totals 1,403 vehicles. Of the said number, the model or year of manufacture is as follows:

- 476 (33 %) not known
- 472 (33 %) within six years
- 262 (20 %) six to 10 years
- 139 (10 %) 10 to 20 years
- 54 (4 %) more than 20 years

Maintenance

- Only one LGU (Pasig) has maintenance capability
- 14 LGUs have employed private companies capable of conducting major engine and body repair works

Type of Transfer

- Las Piñas Transfer Station (Collective Facility)
The Las Piñas Transfer Station serves the cities of Las Piñas, Muntinlupa, Pasay and Makati and the municipality of Parañaque.
- Individual Transfer Stations
Other LGUs use the following types of transfer:
 - Type A (by stage): Pasig and Marikina
 - Type B (by payloader): Manila, Malabon, Valenzuela, Parañaque, Pasay, and Caloocan
 - Type C (by larger reloading vehicles): Caloocan and Malabon

Organization

14,623 people are employed in solid waste management. The LGUs account for 8,420 (or 57.6 %), while the private sector has 6,203 (or 42.4 %).

- *Collectors*: Those deployed in *Collection* total 6,073 personnel, with 838 under the MMDA and the LGUs and 5,235 under the private companies.
- *Street Sweepers*: Those deployed by the LGUs and the MMDA in *Beautification* (including street sweeping and greening) total 5129.