APPENDIX C2

30TH SPACE WING/VAFB P2 REPORTING METRICS SUMMARY TABLES

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APPENDIX C2-1. VAFB POLLUTION PREVENTION REPORTING METRICS
OZONE DEPLETING CHEMICAL (ODC) SUMMARY TABLE

CLASS I ODCs	Baseline	Reporting Year & % Reduction of Waste Stream									
	CY1992	CY1993		CY1994		CY 1995		CY 1996		CY 1997	
Reporting Metric	(lbs)	(lbs)	%Red.*	(lbs)	%Red.*	(lbs)	%Red.*	(lbs)	%Red.*	(lbs)	%Red.*
CFC-11	680	1	99.9%	2	99.7%	16	97.6%				
CFC-12	2,322	1,487	36.0%	204	91.2%	555	76.1%				
CFC-13	0										
CFC-111	0										
CFC-112	0										
CFC-113	48,544	24,616	49.3%	259	99.5%	510	98.9%				
CFC-114	0	11									
CFC-115	60	0	100%	0	100%	0	100%				
CFC-211	0	31									
CFC-212	0	200		0		0					
CFC-213	0										
CFC-214	0										
CFC-215	0										
CFC-216	0										
CFC-217	0										
CFC-500	100	0	100%	0	100%	0	100%				
CFC-502	0	320									
Halon 1211	718	0	100%	103	85.7%	0	100%				
Halon 1301	100	0	100%	0	100%	0	100%				
Halon 2402	7,754	0	100%	0	100%	0	100%				
Carbon Tetrachloride	60	0	100%	0	100%	15	75.0%				
Trichloroethane(TCA)	7,754	4,900	36.8%	5,098	34.3%	1,975	74.5%				
1,1,1 TCA/Methyl Chloroform	0										
Methyl Bromide	0										
TOTALS =	**68,092**	**31,566**	**53.6%**	**5,666**	**91.7%**	**3,071**	**95.5%**		**100%**		**100%**

* "% Reduction" indicates the percentage of chemical reduction from the baseline year (1992)

** Chemicals without baseline data will not have "% Reduction" figure

APPENDIX C2-2. VAFB POLLUTION PREVENTION REPORTING METRICS
EPA-17 INDUSTRIAL TOXICS PROJECT (ITP) SUMMARY TABLE

EPA-17 (Industrial Toxics Project)	Baseline	Reporting Year and % Reduction							
	CY 1992	CY 1993		CY 1994		CY 1995		CY 1996	
Reporting Metric	(lbs)	(lbs)	% Red.*	(lbs)	% Red.*	(lbs)	% Red.*	(lbs)	% Red.*
Benzene	1	20	-1900%	1	0%	349.9	-34890%		
Cadmium & Compounds	1	12	-1100%	29	-2800%	1.2	-20%		
Carbon Tetrachloride (Tetrachloroethane)	60	0	100%	0	100%	14.6	76%		
Chloroform	160	13	92%	0	100%	2.0	99%		
Chromium & Compounds	186	20	89%	7	96%	35.4	81%		
Cyanides	29	26	10%	0	100%	0.2	99%		
Dichloromethane (Methylene Chloride)	715	15	98%	91	87%	75.4	89%		
Lead & Compounds	1,306	339	74%	63	95%	277.7	79%		
Mercury & Compounds	1	12	-1100%	2	-100%	11.9	-1090%		
Methyl Ethyl Ketone (MEK)	960	3,607	-276%	2,855	-197%	975.9	-2%		
Methyl Isobutyl Ketone (MIBK)	106	18	83%	118	-11%	287.2	-171%		
Nickel & Compounds	20	13	35%	48	-140%	3.4	83%		
Tetrachloroethylene	1,425	0	100%	270	81%	0.0	100%		
Toluene	1,419	420	70%	379	73%	1,259.5	11%		
1,1,1 Trichloroethane (1,1,1-TCA)	7,754	4,901	37%	5,098	34%	1,723.6	78%		
Trichloroethylene (TCE)	2,291	3,996	-74%	3	100%	482.0	79%		
Xylenes	893	119	87%	262	71%	751.5	16%		
TOTALS =	17,327	13,531	22%	9,226	47%	6,251.4	64%		100%

* "% Reduction" indicates the percentage of chemical reduction from the baseline year (1992)

APPENDIX C2-3. VAFB POLLUTION PREVENTION REPORTING METRICS
HAZARDOUS WASTE SUMMARY TABLE

HAZARDOUS WASTE (HW)	Baseline	Reporting Year and % Reduction							
	CY 1992	CY 1993		CY 1994		CY 1995		CY 1996	
Reporting Metric	(lbs)	(lbs)	% Red.*	(lbs)	% Red.*	(lbs)	% Red.*	(lbs)	% Red.*
RCRA WASTES:									
Pounds Disposed		814,000		804,788		790,157			
Pounds Recycled Onsite		0		1,560		571			
Pounds Recycled Offsite		270,000		277,568		183,691			
TOTALS =	1,244,000	1,084,000	13%	1,083,916	13%	974,419	22%		
NON RCRA WASTES:									
Pounds Disposed		726,000		447,631		585,426			
Pounds Recycled Onsite		0		0		0			
Pounds Recycled Offsite		240,000		518,802		552,245			
TOTALS =	1,244,000	966,000		966,433		1,137,671			
TOTAL HW GENERATED =	2,488,000	2,050,000	18%	2,050,349	18%	2,112,090	15%		

* "% Reduction" indicates the percentage of waste stream reduction from the baseline year (1992)

** Subjects without baseline data will not have "% Reduction" figure

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
57147	1,1-Dimethyl hydrazine; Dimethylhydrazine	1,1-Dimethyl hydrazine; Dimethylhydrazine									
75558	1,2-Propylenimine	Aziridine, 2-methyl-									
1464535	2,2'-Bioxirane	1,2:3,4-Diepoxybutane									
542767	3-Chloropropionitrile	Propionitrile, 3-chloro-									
534521	4,6-Dinitro-o-cresol and salts	Phenol, 2-methyl-4,6-dinitro-									
504245	4-Aminopyridine	4-Pyridinamine									
75865	Acetone cyanohydrin	Propanenitrile,2-hydroxy-2-methyl-; 2-Methyllactonitrile									
1752303	Acetone thiosemicarbazide	NL									
107028	Acrolein	2-Propenal									
79061	Acrylamide	2-Propenamide									
107131	Acrylonitrile	2-Propenenitrile									
116063	Aldicarb	Propanal, 2-methyl-2-(methylthio)- O-[(methylamino)carbonyl]oxime									
309002	Aldrin	1,4,5,8-Dimethanonaphthalene 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-									
107186	Allyl alcohol	2-Propen-1-ol									
86884	alpha-Naphthylthiourea	Thiourea, 1-naphthaleny-									
20859738	Aluminum phosphide	NL									
7664417	Ammonia	NL									
62533	Aniline	Benzenamine									
1303282	Arsenic pentoxide	Arsenic oxide As205									
1327533	Arsenous oxide; Arsenic trioxide	Arsenic oxide As203									
7784341	Arsenous trichloride	NL									
100447	Benzyl chloride	Benzene, chloromethyl-									
98873	Benzyl dichloride	Benzene, dichloromethyl-; Benzal Chloride									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
15271417	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-ch	NL									
1563662	Carbofuran	NL									
75150	Carbon disulfide	NL									
57749	Chlordane	Chlordane, alpha & gamma isomers; Chlordane, technical; 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-									
470906	Chlorfenvinfos	NL									
7782505	Chlorine	NL									
67663	Chloroform	Methane, trichloro-									
107302	Chloromethyl methyl ether	Methane, chloromethoxy-									
56724	Coumaphos	NL									
4170303	Crotonaldehyde	2-Butenal									
123739	Crotonaldehyde	2-Butenal									
12002038	Cupric acetoarsenite	NL									
506683	Cyanogen bromide	Cyanogen bromide (CN)Br									
111444	Dichloroethyl ether	Ethane, 1,1'-oxybis[2-chloro-; Bis(2-chloroethyl) Ether									
542881	Dichloromethyl Ether	Methane, oxybis(chloro)-									
696286	Dichlorophenylarsine	Arsonous dichloride, phenyl-									
62737	Dichlorvos	NL									
60515	Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl]ester									
77781	Dimethyl sulfate	Sulfuric acid, dimethyl ester									
88857	Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro									
298044	Disulfoton	diethyl S-[2-(ethylthio)ethyl]ester									
514738	Dithiazanine iodide	NL									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
541537	Dithiobiuret	Thioimidodicarbonic diamide [(H2N)C(S)]2NH									
115297	Endosulfan	benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide									
72208	Endrin	Endrin & metabolites; 2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha,									
106898	Epichlorohydrin	Oxirane, (chloromethyl)-									
563122	Ethion	NL									
107120	Ethyl cyanide	Propanenitrile									
371620	Ethylene fluorohydrin	NL									
75218	Ethylene oxide	Oxirane									
107153	Ethylenediamine	NL									
151564	Ethyleneimine	Aziridine									
7782414	Fluorine	NL									
640197	Fluoroacetamide	Acetamide, 2-fluoro-									
50000	Formaldehyde	NL									
2540821	Formothion	NL									
17702577	Formparanate	NL									
110009	Furan	Furfuran									
86500	Guthion	NL									
77474	Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa-chloro-									
4835114	Hexamethylenediamine, N,N'-dibutyl-	NL									
302012	Hydrazine	NL									
7647010	Hydrochloric acid	Hydrogen Chloride									
7664393	Hydrofluoric acid; Hydrogen fluoride	NL									
74908	Hydrogen Cyanide	Hydrocyanic acid									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7783064	Hydrogen sulfide	Hydrogen sulfide H2S									
465736	Isodrin	Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro(1alpha,4alpha,4abeta,5beta,8beta,8abeta)-									
55914	Isofluorphate	Phosphorofluoridic Acid, bis(1-methyl-ethyl)ester; Diisopropylfluorophosphate									
108236	Isopropyl chloroformate	NL									
21609905	Leptophos	NL									
58899	Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1alpha, 2alpha, 3beta, 4alpha,5alpha, 6beta)-; gamma-BHC; Hexachlorocyclohexane (gamma isomer)									
109773	Malononitrile	Propanedinitrile									
2032657	Mercaptodimethur	NL									
1600277	Mercuric acetate	NL									
126987	Methacrylonitrile	2-Propenenitrile, 2-methyl-									
16752775	Methomyl	Ethanimidothioic acid, N-[[(methyl-amino)carbonyl]oxy]-,methyl ester									
74839	Methyl Bromide	Bromomethane									
79221	Methyl chloroformate	Carbonochloridic acid, methyl ester; Methyl chlorocarbonate									
60344	Methyl hydrazine	Hydrazine, methyl-									
624839	Methyl isocyanate	Methane, isocyanato-									
74931	Methyl Mercaptan	Methanethiol; Thiomethanol									
298000	Methyl Parathion	dimethyl O-(4-nitrophenyl) ester									
556649	Methyl thiocyanate	NL									
78944	Methyl vinyl ketone	NL									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7786347	Mevinphos	NL									
315184	Mexacarbate	NL									
50077	Mitomycin C	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,[1aS-(1aalpha,8beta,8aalpha,8balpha)]-									
2763964	Muscimol	3(2H)-Isoxazolone,5-(aminomethyl)-; 5-(Aminomethyl)-3-isoxazolol									
62759	N-Nitrosodimethylamine; Nitrosodimethylamine	nitroso-; Nitrosodimethylamine									
13463393	Nickel carbonyl	Nickel carbonyl Ni(CO)4, (T-4)-									
54115	Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)									
7697372	Nitric acid	NL									
10102439	Nitric oxide	Nitrogen oxide NO									
98953	Nitrobenzene	Benzene, nitro-									
10102440	Nitrogen dioxide	Nitrogen oxide NO2									
51752	Nitrogen mustard; Mechorethamine	NL									
297972	O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester									
152169	Octamethylpyrophosphoramide	Dipshosphoroamide, octamethyl-									
56382	Parathion	diethyl O-(4-nitrophenyl)ester									
108952	Phenol	Benzene, hydroxy-									
62384	Phenylmercury acetate	Mercury, (acetato-O)phenyl-; Phenylmercuric Acetate									
103855	Phenylthiourea	Thiourea, phenyl-									
298022	Phorate	diethyl S-(ethylthio), methyl ester									
75445	Phosgene	Carbonic dichloride									
13171216	Phosphamidon	NL									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7803512	Phosphine	NL									
7723140	Phosphorus	NL									
10025873	Phosphorus oxychloride	NL									
7719122	Phosphorus trichloride	NL									
10124502	Potassium arsenite	NL									
151508	Potassium cyanide	Potassium cyanide K(CN)									
506616	Potassium silver cyanide	Argentate(1-),bis(cyano-C)-, potassium									
75569	Propylene oxide	NL									
129000	Pyrene	NL									
14167181	Salcomine	NL									
7783008	Selenious acid	NL									
7631892	Sodium arsenate	NL									
7784465	Sodium arsenite	NL									
26628228	Sodium Azide (Na(N3))	NL									
143339	Sodium cyanide	Sodium Cyanide Na(CN)									
62748	Sodium fluoroacetate; Fluoroacetic acid, sodium salt	salt; Acetic Acid, fluoro-, sdium salt									
10102188	Sodium selenite	NL									
57249	Strychnine and salts	Strichnidin-10-one									
7664939	Sulfuric acid	NL									
77816	Tabun	NL									
78002	Tetraethyl lead	Plumbane, tetraethyl-									
107493	Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester									
3689245	Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester									
509148	Tetranitromethane	Methane, tetranitro-									
7791120	Thallium chloride TlCl	Thallium (I)chloride									
10031591	Thallium sulfate	Sulfuric acid, dithallium(1+)salt									
6533739	Thallium(I) carbonate	Carbonic acid, dithallium(1+)salt									

APPENDIX C2-4. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
EXTREMELY HAZARDOUS SUBSTANCE SUMMARY TABLE

EXTREMELY HAZARDOUS WASTE (EHS)			Baseline	Reporting Year & % Reduction							
			CY 1992	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	REGSYN	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7446186	Thallium(I) sulfate; Thallous sulfate	Sulfuric acid, dithallium(1+)salt									
2757188	Thallous malonate	NL									
2231574	Thiocarbazide	NL									
39196184	Thiofanox	2-Butanone, 3,3-dimethyl-1-(methyl-thio)-, O[(methylamino)carbonyl]oxime									
108985	Thiophenol	Benzenethiol									
79196	Thiosemicarbazide	Hydrazinecarbothioamide									
5344821	Thiourea, (2-chlorophenyl)-	1-(o-Chlorophenyl)thiourea									
584849	Toluene Diisocyanate	diisocyanatomethyl-; Toluene diisocyanate									
8001352	Toxaphene	Camphene, octachloro-; Camphechlor									
594423	Trichloromethanesulfenyl chloride	Methanesulfenyl chloride, trichloro-									
555771	Tris(2-chloroethyl)amine	NL									
1314621	Vanadium pentoxide	Vanadium oxide V2O5									
108054	Vinyl acetate	Vinyl acetate monomer									
81812	Warfarin & salts, when present at concentrations greater than 0.3%	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)- & salts, when present at concentrations greater than 0.3%.									
1314847	Zinc phosphide	Zinc phosphide Zn3P2, when present at concentrations greater than 10%.									

APPENDIX C2-5. VAFB POLLUTION PREVENTION REPORTING METRICS
MUNICIPAL SOLID WASTE SUMMARY TABLE

Municipal Solid Waste (MSW)	Baseline	Reporting Year & % Reduction					
	CY 1992	CY 1993		CY 1994		CY 1995	
Reporting Metric	(lbs)	(lbs)	% Red.*	(lbs)	% Red.*	(lbs)	% Red.*
Base Industrial Operations							
Disposed						17,897,663	
Disposed (Const./Demo. Debris)						18,500,846	
Recycled						3,634,428	
Composted						3,430,002	
Diverted						20,052,062	
TOTAL GENERATED =						63,515,001	
Military Family Housing (MFH)							
Disposed	23,490,000	26,252,000	-12%	31,743,200	-35%	2,920,831	88%
Disposed (Const./Demo Debris)						2,812,732	
Recycled	11,054,000	4,678,000	58%	49,701,600	-350%	512,619	95%
Composted				2,065,400		551,865	
Diverted						39,098,611	
TOTAL GENERATED =	34,544,000	30,930,000	10%	83,510,200	-142%	45,896,658	-33%
TOTAL MSW GENERATED BASEWIDE =	34,544,000	30,930,000	10%	83,510,200	-142%	109,411,659	-217%

* % "Reduction" indicates the percentage of waste stream reduction from the baseline year (1992).

** Subjects without baseline data will not have a "% Reduction" figure

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
354110	1,1,1,2-Tetrachloro-2-fluoroethane									
630206	1,1,1,2-Tetrachloroethane									
71556	1,1,1-Trichloroethane									
354143	1,1,2,2-Tetrachloro-1-fluoroethane									
79345	1,1,2,2-Tetrachloroethane									
79005	1,1,2-Trichloroethane									
13474889	1,1-Dichloro-1,2,2,3,3-pentafluoropropane									
812044	1,1-Dichloro-1,2,2-trifluoroethane									
111512562	1,1-Dichloro-1,2,3,3,3-pentafluoropropane									
1717006	1,1-Dichloro-1-fluoroethane									
75343	1,1-Dichloroethane									
57147	1,1-Dimethyl hydrazine; Dimethylhydrazine									
96184	1,2,3-trichloropropane									
120821	1,2,4-Trichlorobenzene									
95636	1,2,4-Trimethylbenzene									
106887	1,2-Butylene oxide									
96128	1,2-Dibromo-3-chloropropane (DBCP)									
422446	1,2-Dichloro-1,1,2,3,3-pentafluoropropane									
354234	1,2-Dichloro-1,1,2-trifluroethane									
431867	1,2-Dichloro-1,1,3,3,3-pentafluoropropane									
1649087	1,2-Dichloro-1,1-difluoroethane									
540590	1,2-Dichloroethylene									
78875	1,2-Dichloropropane									
122667	1,2-Diphenylhydrazine									
95545	1,2-Phenylenediamine									
615281	1,2-Phenylenediamine dihydrochloride									
75558	1,2-Propylenimine									
38661722	1,3-Bis(methylisocyanate)-cyclohexane									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
106990	1,3-Butadiene; Butadiene									
507551	1,3-Dichloro-1,1,2,2,3-pentafluoropropane									
136013791	1,3-Dichloro-1,1,2,3,3-pentafluoropropane									
541731	1,3-Dichlorobenzene									
542756	1,3-Dichloropropene									
123615	1,3-Phenylene diisocyanate									
108452	1,3-Phenylenediamine									
1120714	1,3-Propane sultone									
10347543	1,4-Bis(methylisocyanate)-cyclohexane									
2556367	1,4-Cyclohexane diisocyanate									
764410	1,4-Dichloro-2-butene									
123911	1,4-Dioxane									
104494	1,4-Phenylene diisocyanate									
624180	1,4-Phenylenediamine dihydrochloride									
3173726	1,5-Naphthalene diisocyanate									
4080313	1-(3-chlor-2-propenyl)-3,5,7-triaza-1-azoniatricyclo(3.3.1.1)decane chloride									
82280	1-Amino-2-methylanthraquinone									
35691657	1-Bromo-1-(bromomethyl)-1,3-propanedicarbonitrile									
354256	1-Chloro-1,1,2,2-tetrafluoroethane									
75683	1-Chloro-1,1-difluoroethane									
5522430	1-nitropyrene									
1464535	2,2'-Bioxirane									
16938220	2,2,4-Trimethylhexamethylene diisocyanate									
10222012	2,2-Dibromo-3-nitrilopropionamide									
128903219	2,2-Dichloro-1,1,1,3,3-pentafluoropropane									
306832	2,2-Dichloro-1,1-trifluoroethane									
2655154	2,3,5-Trimethylphenyl methylcarbamate									
422480	2,3-Dichloro-1,1,1,2,3-pentafluoropropane									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
78886	2,3-Dichloropropene									
75790873	2,4'-Diisocyanatodiphenyl									
15646965	2,4,4-Trimethylhexamethylene diisocyanate									
95954	2,4,5-Trichlorophenol									
88062	2,4,6-Trichlorophenol									
1928434	2,4-D 2-ethylhexyl ester									
94804	2,4-D butyl ester									
2971382	2,4-D chlorocrotyl ester									
1929733	2,4-D Ester									
94111	2,4-D Esters									
1320189	2,4-D Esters									
2702729	2,4-D sodium salt									
94757	2,4-D, salts and esters									
53404378	2,4-D-ethyl-4-methylpentyl ester									
94826	2,4-db; 2,4-dichloro-phenoxybutyric acid									
615054	2,4-Diaminoanisole									
39156417	2,4-Diaminoanisole sulfate									
120832	2,4-Dichlorophenol									
105679	2,4-Dimethylphenol									
51285	2,4-Dinitrophenol									
121142	2,4-Dinitrotoluene									
99309	2,6-dichloro-4-nitroaniline									
576261	2,6-Dimethylphenol									
606202	2,6-Dinitrotoluene									
87627	2,6-Xylidine									
53963	2-Acetylaminofluorene									
117793	2-Aminoanthraquinone									
52517	2-Bromo-2-nitropropane-1,3-diol									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
2837890	2-Chloro-1,1,1,2-dichloroethane									
75887	2-chloro-1,1,1-trifluorethane									
126998	2-Chloro-1,3-butadiene									
532274	2-Chloroacetophenone									
110805	2-Ethoxyethanol; Ethylene glycol monoethyl ether									
149304	2-Mercaptobenzothiazole									
109864	2-Methoxyethanol; Ethylene glycol monomethyl ether									
88755	2-Nitrophenol									
79469	2-Nitropropane									
79469	2-Nitropropane									
90437	2-Phenylphenol									
109068	2-Picoline									
91941	3,3'-Dichlorobenzidine									
612839	3,3'-Dichlorobenzidine dihydrochloride									
64969342	3,3'-Dichlorobenzidine sulfate									
119904	3,3'-Dimethoxybenzidine									
111984099	3,3'-Dimethoxybenzidine									
20325400	3,3'-dimethoxybenzidine dihydrochloride									
91930	3,3'-dimethoxybenzidine-4,4'-diisocyanate									
139253	3,3'-Dimethyl diphenylmethane-4,4'-diisocyanate									
91974	3,3'-Dimethyl-4,4'-diphenylene diisocyanate									
119937	3,3'-Dimethylbenzidine									
612828	3,3'-dimethylbenzidine dihydrochloride									
41766750	3,3'Dimethylbenzidine dihydrofluoride									
422560	3,3-Dichloro-1,1,1,2,2-pentafluoropropane									
460355	3-Chloro-1,1,1-trifluoropropane									
542767	3-Chloropropionitrile									
55406536	3-Iodo-2-propynyl									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
101804	4,4'-Diaminodiphenyl ether									
4128738	4,4'-Diisocyanatodiphenyl									
80057	4,4'-Isopropylidenediphenol; Bisphenol A									
101144	4,4'-Methylenebis(2-chloroaniline) (MBOCA)									
101611	4,4'-Methylenebis(N,N-dimethyl)benzenamine									
101779	4,4'-Methylenedianiline; Methylene dianiline									
139651	4,4'-Thiodianiline									
534521	4,6-Dinitro-o-cresol and salts									
60093	4-Aminoazobenzene									
92671	4-Aminobiphenyl									
60117	4-Dimethylaminoazobenzene									
75790840	4-Methyldiphenylmethane-3,4-diisocyanate									
92933	4-Nitrobiphenyl									
3697243	5-methylchrysene									
99592	5-Nitro-o-anisidine									
99558	5-Nitro-o-toluidine									
57976	7,12-Dimethylbenz[a]anthracene									
194592	7h-dibenzo[c,g]carbazole									
30560191	Acephate									
75070	Acetaldehyde									
60355	Acetamide									
67641	Acetone									
75865	Acetone cyanohydrin									
75058	Acetonitrile									
98862	Acetophenone									
62476599	Acifluorfen									
107028	Acrolein									
79061	Acrylamide									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
79107	Acrylic acid									
107131	Acrylonitrile									
15972608	Alachlor									
116063	Aldicarb									
309002	Aldrin									
107186	Allyl alcohol									
107051	Allyl chloride									
107119	Allylamine									
319846	alpha-BHC									
134327	alpha-Naphthylamine									
7429905	Aluminum (fume or dust)									
1344281	Aluminum oxide (fibrous forms)									
20859738	Aluminum phosphide									
834128	Ametryn									
33089611	Amitraz									
61825	Amitrole									
7664417	Ammonia									
6484522	Ammonium nitrate (solution)									
7783202	Ammonium sulfate (solution)									
101053	Anilazine									
62533	Aniline									
120127	Anthracene									
7440360	Antimony									
7440382	Arsenic									
1332214	Asbestos (friable)									
1912249	Atrazine									
492808	Auramine									
71751412	Avermectin									

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TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7440393	Barium									
22781233	Bendiocarb									
1861401	Benfluralin									
56553	Benz[a]anthracene									
55210	Benzamide									
71432	Benzene									
92875	Benzidine									
207089	Benzo(k)fluoranthene									
50328	Benzo[a]pyrene									
205992	Benzo[b]fluoranthene									
205823	Benzo[j]fluoranthene									
98077	Benzotrichloride									
98884	Benzoyl chloride									
94360	Benzoyl peroxide									
100447	Benzyl chloride									
98873	Benzyl dichloride									
7440417	Beryllium									
91598	beta-Naphthylamine									
57578	beta-Propiolactone									
82657043	Bifenthrin									
92524	Biphenyl									
103231	Bis(2-ethylhexyl) adipate									
56359	Bis(tributyltin)oxide									
28249776	Bolero (thiobencarb)									
10294345	Boron trichloride									
7637072	Boron trifluoride									
314409	Bromacil									
53404196	Bromacil lithium salt									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7726956	Bromine									
353593	Bromochlorodifluoromethane [Halon 1211]									
75252	Bromoform									
75638	Bromotrifluoromethane [Halon 1301]									
1689992	Bromoxnil octanoate									
1689845	Bromoxynil									
357573	Brucine									
357573	Brucine									
141322	Butyl acrylate; n-butyl acrylate									
85687	Butyl benzyl phthalate									
123728	Butyraldehyde; n-butyraldehyde									
4680788	C.I. Acid Green 3									
6459945	C.i. acid red 114, disodium salt									
569642	C.I. Basic Green 4									
989388	C.I. Basic Red 1									
1937377	C.I. Direct Black 38									
28407376	C.I. Direct Blue 218									
2602462	C.I. Direct Blue 6									
16071866	C.I. Direct Brown 95									
2832408	C.I. Disperse Yellow 3									
81889	C.I. Food Red 15									
3761533	C.I. Food Red 5									
3118976	C.I. Solvent Orange 7									
842079	C.I. Solvent Yellow 14									
97563	C.I. Solvent Yellow 3									
128665	C.I. Vat Yellow 4									
7440439	Cadmium									
156627	Calcium cyanamide									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
133062	Captan									
63252	Carbaryl									
1563662	Carbofuran									
75150	Carbon disulfide									
56235	Carbon Tetrachloride									
463581	Carbonyl sulfide									
5234684	Carboxin									
120809	Catechol									
2439012	Chinomethionate									
133904	Chloramben									
57749	Chlordane									
115286	Chlorendic acid									
7782505	Chlorine									
10049044	Chlorine dioxide									
79118	Chloroacetic acid									
108907	Chlorobenzene									
510156	Chlorobenzilate									
75456	Chlorodifluoroethane									
75003	Chloroethane									
67663	Chloroform									
90982324	Chloroimuron ethyl									
107302	Chloromethyl methyl ether									
76062	Chloropicrin									
63938103	Chlorotetrafluoroethane									
1897456	Chlorothalonil									
75729	Chlorotrifluoromethane									
5598130	Chlorpyrifos methyl									
64902723	Chlorsulfuron									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
7440473	Chromium									
218019	Chrysene									
7440484	Cobalt									
7440508	Copper									
8001589	Creosote									
1319773	Cresol (mixed isomers)									
4170303	Crotonaldehyde									
98828	Cumene									
80159	Cumene Hydroperoxide									
135206	Cupferron									
21725462	Cyanazine									
1134232	Cycloate									
110827	Cyclohexane									
108930	Cyclohexanol									
68359375	Cyfluthrin									
68085858	Cyhalothrin									
28057489	d-trans Alletrhin									
533744	Dazomet									
53404607	Dazomet sodium salt									
1163195	Decabromodiphenyl oxide									
78488	DEF									
13684565	Desmedipham									
2303164	Diallate									
333415	Diazinon									
334883	Diazomethane									
226368	Dibenz[a,h]acridine									
53703	Dibenz[a,h]anthracene									
189559	Dibenz[a,i]pyrene									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
224420	Dibenz[a,j]acridine									
5385751	Dibenzo[a,e]fluoranthene									
192654	Dibenzo[a,e]pyrene									
189640	Dibenzo[a,h]pyrene									
191300	Dibenzo[a,l]pyrene									
132649	Dibenzofuran									
124732	Dibromotetrafluoroethane [Halon 2402]									
84742	Dibutyl Phthalate									
1918009	Dicamba									
90454185	Dichloro-1,1,2-trichloroethane									
25321226	Dichlorobenzene (mixed isomers)									
75274	Dichlorobromomethane									
75718	Dichlorodifluoromethane [CFC-12]									
111911	Dichloroethoxy ethane									
111444	Dichloroethyl ether									
108601	Dichloroisopropyl Ether									
542881	Dichloromethyl Ether									
127564925	Dichloropentafluoropropane									
97234	Dichlorophene									
76142	Dichlorotetrafluoroethane [CFC-114]									
34077877	Dichlorotrifluoroethane									
120365	Dichlorprop									
62737	Dichlorvos									
51338273	Diclofop methyl									
115322	Dicofol									
77736	Dicylopentadiene									
111422	Diethanolamine									
38727558	Diethatyl ethyl									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
84662	Diethyl Phthalate									
64675	Diethyl sulfate									
134190377	Diethyldiisocyanatobenzene									
117817	Diethylhexyl Phthalate (DEHP)									
35367385	Diflubenzuron									
101906	Diglycidyl resorcinol ether (dgre)									
94586	Dihydrosafrole									
55290647	Dimethipin									
2524030	Dimethyl phosphorochloridothioate									
131113	Dimethyl phthalate									
77781	Dimethyl sulfate									
124403	Dimethylamine									
2300665	Dimethylamine dicambe									
79447	Dimethylcarbamyl Chloride									
75785	Dimethyldichlorosilane									
68122	Dimethylformamide									
25321146	Dinitrotoluene (mixed isomers)									
39300453	Dinocap									
88857	Dinoseb									
957517	Diphenamide									
122394	Diphenylamine									
57410	Diphenylhydantoin									
2164070	Dipotassium endothall									
136458	Dipropyl isocinchomeronate									
138932	Disodium cyanodithioimidocarbonate									
541537	Dithiobiuret									
330541	Diuron									
2439103	Dodine									

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TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
106898	Epichlorohydrin									
759944	Eptc									
13194484	Ethoprophos									
140885	Ethyl acrylate									
541413	Ethyl chloroformate									
100414	Ethylbenzene									
74851	Ethylene									
106934	Ethylene dibromide									
107062	Ethylene dichloride (EDC)									
107211	Ethylene glycol									
75218	Ethylene oxide									
151564	Ethyleneimine									
96457	Ethylenethiourea									
52857	Famphur									
60168889	Fenarimol									
13356086	Fenbutatinoxide									
66441234	Fenoxaprop ethyl									
72490018	Fenoxycarb									
39515418	Fenpropathrin									
55389	Fenthion									
51630581	Fenvalerate									
14484641	Ferbam									
69806504	Fluazifop-butyl									
2164172	Fluometuron									
7782414	Fluorine									
51218	Fluorouracil									
69409945	Fluvalinate									
150505	Folex									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
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TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
133073	Folpet									
72178020	Fomesafen									
50000	Formaldehyde									
64186	Formic acid									
76131	Freon 113; 1,1,2-trichloro-1,2,2-trifluoroethane									
76448	Heptachlor									
87683	Hexachloro-1,3-butadiene; Hexachlorobutadiene									
118741	Hexachlorobenzene									
77474	Hexachlorocyclopentadiene									
67721	Hexachloroethane									
1335871	Hexachloronaphthalene									
70304	Hexachlorophene									
822060	Hexamethylene-1,6-diisocyanate									
680319	Hexamethylphosphoramide									
110543	Hexane									
51235042	Hexazinone									
67485294	Hydramethylnon									
302012	Hydrazine									
10034932	Hydrazine sulfate									
7647010	Hydrochloric acid									
7664393	Hydrofluoric acid; Hydrogen fluoride									
74908	Hydrogen Cyanide									
7783064	Hydrogen sulfide									
123319	Hydroquinone									
35554440	Imazalil									
193395	Indeno(1,2,3-cd)pyrene									
13463406	Iron, pentacarbonyl-									
78842	Isobutyraldehyde									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

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		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
465736	Isodrin									
25311711	Isofenphos									
4098710	Isophorone diisocyanate									
67630	Isopropyl alcohol (mfg-strong acid process)									
120581	Isosafrole									
77501634	Lactofen									
7439921	Lead									
58899	Lindane									
330552	Linuron									
554132	Lithium carbonate									
99650	m-Dinitrobenzene									
108383	m-Xylene									
121755	Malathion									
108316	Maleic anhydride									
109773	Malononitrile									
12427382	Maneb									
7439965	Manganese									
94746	Mcpa; 2-methyl-4-chlorophenoxyacetic acid									
93652	Mecoprop									
2032657	Mercaptodimethur									
7439976	Mercury									
137428	Metam-sodium									
126987	Methacrylonitrile									
563473	Methallyl chloride									
67561	Methanol									
20354261	Methazole									
3653483	Methoxone sodium salt									
72435	Methoxychlor									

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		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
17804352	Methyl 2-benzimidazole carbamate									
96333	Methyl acrylate									
74839	Methyl Bromide									
74873	Methyl Chloride									
79221	Methyl chloroformate									
78933	Methyl ethyl ketone (MEK)									
60344	Methyl hydrazine									
74884	Methyl Iodide									
108101	Methyl isobutyl ketone									
624839	Methyl isocyanate									
556616	Methyl isothiocyanate									
74931	Methyl Mercaptan									
80626	Methyl Methacrylate									
298000	Methyl Parathion									
1634044	Methyl tert-butyl ether									
5124301	Methylene bis(4-cyclohexylisocyanate)									
74953	Methylene Bromide									
75092	Methylene chloride									
101688	Methylenebis(phenylisocyanate); MBI									
75796	Methyltrichlorosilane									
9006422	Metiram									
21087645	Metribuzin									
7786347	Mevinphos									
90948	Michler's ketone									
1313275	Molybdenum trioxide									
76153	Monochloropentafluoroethane [CFC-115]									
150685	Monuron									
505602	Mustard gas									

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TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
88671890	Myclobutanil									
121697	N,N-Dimethylaniline									
71363	n-Butyl alcohol									
872504	N-Methyl-2-pyrrolidone									
924425	N-methyloacrylamide									
759739	N-Nitroso-N-ethylurea									
684935	N-Nitroso-N-methylurea									
924163	N-Nitrosodi-n-butylamine									
621647	N-Nitrosodi-n-propylamine; Di-n-propylnitrosamine									
55185	N-Nitrosodiethylamine									
62759	N-Nitrosodimethylamine; Nitrosodimethylamine									
86306	N-Nitrosodiphenylamine									
4549400	N-Nitrosomethylvinylamine									
59892	N-Nitrosomorpholine									
16543558	N-Nitrosonornicotine									
100754	N-Nitrosopiperidine									
142596	Nabam									
300765	Naled									
91203	Naphthalene									
7440020	Nickel									
1929824	Nitrapyrin									
100016	Nitrate compounds									
7697372	Nitric acid									
139139	Nitrilotriacetic acid									
98953	Nitrobenzene									
1836755	Nitrofen									
51752	Nitrogen mustard; Mechorethamine									
55630	Nitroglycerine									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
27314132	Norflurazon									
90040	o-Anisidine									
134292	o-Anisidine hydrochloride									
95487	o-Cresol									
95501	o-Dichlorobenzene									
528290	o-Dinitrobenzene									
95534	o-Toluidine									
636215	o-Toluidine hydrochloride									
95476	o-Xylene; Benzene, o-dimethyl-									
2234131	Octachloronaphthalene									
2212671	Ordram (molinate)									
19044883	Oryzalin									
20816120	Osmium tetroxide									
19666309	Oxadiazon									
301122	Oxydemetonmethyl									
42874033	Oxyfluorfen									
10028156	Ozone									
100027	p--Nitrophenol									
104949	p-Anisidine									
106514	p-Benzoquinone									
95692	p-chloro-o-toluidine									
106478	p-Chloroaniline									
104121	p-Chlorophenyl									
120718	p-Cresidine									
106445	p-Cresol									
106467	p-Dichlorobenzene									
100254	p-Dinitrobenzene									
100016	p-Nitroaniline									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
156105	p-Nitrosodiphenylamine									
106423	p-Xylene									
123637	Paraldehyde									
1910425	Paraquat									
56382	Parathion									
1114712	Pebulate									
40487421	Pendimethalin									
76017	Pentachloroethane									
82688	Pentachloronitrobenzene (PCNB)									
87865	Pentachlorophenol (PCP)									
57330	Pentobarbital sodium									
79210	Peracetic acid									
52645531	Permethrin									
85018	Phenanthrene									
108952	Phenol									
26002802	Phenothrin									
75445	Phosgene									
7803512	Phosphine									
7664382	Phosphoric acid									
7723140	Phosphorus									
85449	Phthalic anhydride									
1918021	Picloram									
88891	Picric acid									
51036	Piperonyl butoxide									
29232937	Pirimphos methyl									
1336363	Polychlorinated biphenyls (PCBs)									
9016879	Polymeric diphenylmethane diisocyanate									
7758012	Potassium bromate									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
128030	Potassium dimethyldithiocarbamate									
137417	PotassiumN-methyldithiocarbamate									
41198087	Profenofos									
7287196	Prometryn									
23950585	Pronamide									
1918167	Propachlor									
709988	Propanil									
2312358	Propargite									
107197	Propargyl alcohol									
31218834	Propetamphos									
60207907	Propiconazole									
123386	Propionaldehyde									
114261	Propoxur									
115071	Propylene (Propene)									
75569	Propylene oxide									
110861	Pyridine									
91225	Quinoline									
76578148	Quizalofop-ethyl									
10453868	Resmethrin									
78488	S,S,S-Tributyltrithiophosphate									
81072	Saccharin (manufacturing); Saccharin and salts									
94597	Safrole									
78922	sec-Butyl alcohol; s-butyl alcohol									
7782492	Selenium									
74051802	Sethoxydim									
7440224	Silver									
122349	Simazine									
26628228	Sodium Azide (Na(N3))									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
1982690	Sodium dicamba									
128041	Sodium dimethyldithiocarbamate									
62748	Sodium fluoroacetate; Fluoroacetic acid, sodium salt									
7632000	Sodium nitrite									
132274	Sodium o-phenylphenate									
131522	Sodium pentachlorophenate									
57249	Strychnine and salts									
100425	Styrene									
96093	Styrene oxide									
7664939	Sulfuric acid									
2699798	Sulfuryl fluoride									
35400432	Sulprofos									
34014181	Tebuthiuron									
3383968	Tempephos									
5902512	Terbacil									
75650	tert-Butyl alcohol; t-butyl alcohol									
127184	Tetrachloroethylene									
961115	Tetrachlorvinphos									
64755	Tetracycline hydrochloride									
7696120	Tetramethrin									
7440280	Thallium									
148798	Thiabendazole									
148798	Thiabendazole									
62555	Thioacetamide									
59669260	Thiodicarb									
23564069	Thiophanate									
23564058	Thiophanate-methyl									
79196	Thiosemicarbazide									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS
TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
62566	Thiourea									
137268	Thiram									
1314201	Thorium dioxide									
7550450	Titanium tetrachloride									
108883	Toluene									
91087	Toluene Diisocyanate									
584849	Toluene Diisocyanate									
26471625	Toluene Diisocyanate (mixed isomers)									
95807	Toluenediamine									
25376458	Toluenediamine (mixed isomers)									
	TOTALS =									
8001352	Toxaphene									
10061026	Trans-1,3-dichloropropene									
110576	trans-1,4-Dichloro-2-butene									
43121433	Triadimeton									
2303175	Triallate									
68768	Triaziquone									
101200480	Tribenuron methyl									
1983104	Tributylin fluoride									
2155706	Tributyltin methacrylate									
52686	Trichlorfon									
76028	Trichloroacetyl chloride									
79016	Trichloroethylene									
75694	Trichlorofluoromethane [CFC-11]									
594423	Trichloromethanesulfenyl chloride									
57213691	Triclopyr triethylammonium									
121448	Triethylamine									
1582098	Trifluralin									

APPENDIX C2-6. 30TH SPACE WING POLLUTION PREVENTION REPORTING METRICS TOXIC RELEASE INVENTORY (TRI) SUMMARY TABLE

TOXIC RELEASE INVENTORY (TRI) CHEMICALS		Baseline	Reporting Year & % Reduction							
		CY 1994	CY 1996		CY 1997		CY 1998		CY 1999	
CAS #	COMNAME	(lbs)	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.	(lbs)	% Red.
26644462	Triforine									
75774	Trimethylchlorosilane									
639587	Triphenyltin chloride									
76879	Triphenyltin hydroxide									
126727	Tris(2,3-dibromopropyl) phosphate									
72571	Trypan blue									
51796	Urethane									
7440622	Vanadium (fume or dust)									
50471448	Vinclozolin									
108054	Vinyl acetate									
593602	Vinyl bromide									
75014	Vinyl Chloride									
75354	Vinylidene chloride; 1,1-Dichloroethylene									
1330207	Xylene (mixed isomers)									
7440666	Zinc									
12122677	Zineb									

* " % Reduction " indicates the percentage of waste stream reduction from the baseline year (1994)

WORKSHEET 1
SITE DESCRIPTION

- List the operations at this shop/building:

- What are the major products?:

- Provide a rough estimate of production volume per month (e.g., the number of circuit boards produced):

- What are the major waste streams? What media do they affect? How much waste is generated in each?

- Has the shop/building already implemented any waste reduction or recycling techniques? If yes, describe the technique results to date.

- How many people work in this shop/building? How many hours is it operational?

- The following sources contain information that may help you determine the type and amount of waste generated at your shop:

    - Work Flow Diagram
    - Hazardous Waste Manifests
    - Emission Inventories
    - Annual/Biennial Reports
    - Permit/Permit Applications
    - Material Safety Data Sheets
    - Chemical Materials Inventory
    - Permitting Details/Conditions
    - Environmental Audit Reports

WORKSHEET 2
WASTE STREAM ASSESSMENT FORM

Questions	Waste #1	Waste #2	Waste #3	Waste #4
Waste Stream #/ Process Unit				
Brief Description of how waste is generated				
Waste Stream Name (A) air emission (WW) waste water (SW) solid waste (HW) haz waste				
Occurrence (R) Regularly (NR) non-recurrent				
Monthly generation rate				
Treatment/Disposal method (R) recycled (L) landfill (S) sewage treatment plant (I) incinerator (O) other				
Disposal Cost				

WORKSHEET 3
MANAGEMENT PRACTICES

Questions	Y	N
GENERAL		
Does the shop have written procedures for shop inspection/maintenance?		
Does the shop show signs of poor housekeeping (cluttered walkways, uncovered drums, etc.)?		
Does the aisle appear adequate for equipment, bulky items?		
Is the drum storage area covered?		
Are all drums raised off the ground (e.g. on pallets)?		
Does the shop have equipment to prevent releases caused by over-filling of storage tanks (e.g. high level shutdown/alarms, secondary containment)?		
Are there noticeable spills, leaking containers, or leaking valves, pumps, hose fittings?		
Are containers labeled as to their contents and hazards?		
Is there smoke, dust or fumes indicating material losses?		
Does the shop have a training program for raw materials handling, spill prevention, proper storage techniques and waste handling procedures?		
If this is a training facility, are students trained to be environmentally aware?		
INVENTORY CONTROL		
Does the shop have a single point of contact for ordering and distributing new supplies?		
Does the shop have written procedures regarding inventory control?		
Is inventory used in first-in, first-out order?		
Do you dispose of products due to expired shelf-life?		
Are empty containers returned to the supplier, or re-used on-site?		
Does the shop buy products in bulk?		
Estimate the volume of chemicals maintained on-site: If figures are unavailable, provide qualitative assessment: Low, Medium, High (Low = one supply cabinet/ Medium = 1 to 3-55 gallon drums/ High = stock room with more than 50 product with > 5-55 gallon drums) Check the inventory quickly - are there any toxic substances? (E.G., benzene, methyl ethyl ketone, methylene chloride, tetrachloroethylene, toluene, trichloroethylene, xylene - these might be present in degreasers, adhesives, epoxies)		

WORKSHEET 4
OPPORTUNITY ASSESSMENT

Opportunity Title:

Describe the Opportunity:

Waste Stream(s) Affected:

Input Material(s) Affected:

Product(s) Affected:

Indicate Type of Opportunity : (the opportunity may be a combination of source reduction, recycling, and treatment)

Source Reduction
_____Equipment Change
_____Personnel/Procedure Change
_____Material Change
Recycling/Reuse
_____Onsite
_____Offsite
Treatment/Disposal

After source reduction and/or recycling have been implemented, residual wastes may still require treatment and disposal (e.g., still bottoms or spent filters from an on-site solvent recycler).

Treatment required
_____Biological
_____Incineration
_____pH adjustment
_____Precipitation
_____Solidification
_____Other
Disposal
_____Landfill
_____Surface Impoundment
_____Deep Well
_____Other

WORKSHEET 4 (Continued)
OPPORTUNITY ASSESSMENT

Feasibility Assessment
Explain why the opportunity appears to be technically feasible:

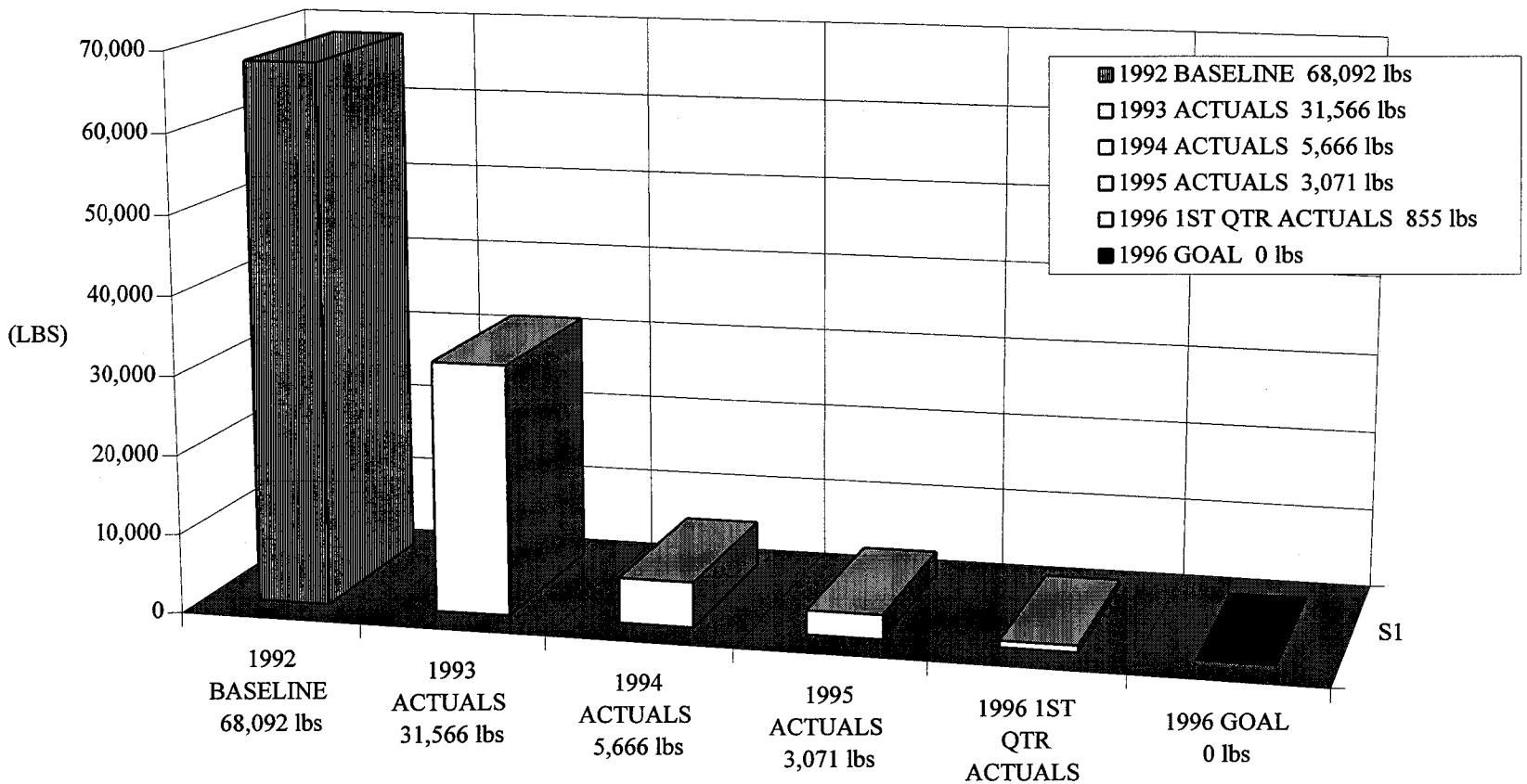
Estimate the one-time cost to implement the opportunity, taking into account equipment costs, labor, etc.

Estimate the annual recurring costs to implement the opportunity, taking into account materials, manpower, utilities, etc.

Estimate how much money implementation will save the facility annually.

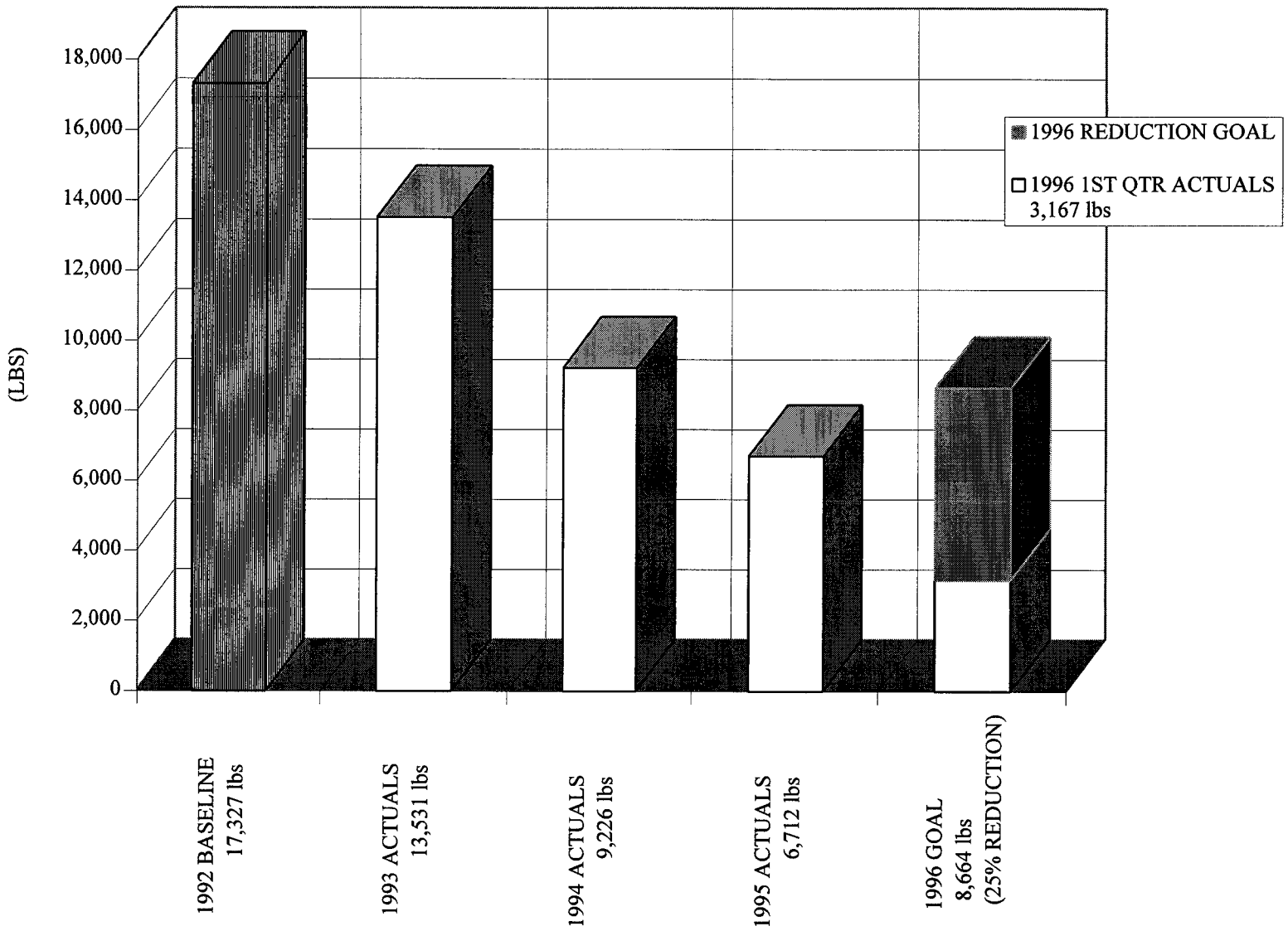
Would the opportunity be difficult to implement?	Y	N
Staff training required	Y	N
Staff/management resistance expected	Y	N
Cost to implement is high	Y	N
Labor is required to install and maintain new equipment	Y	N
Other factors (please add)	Y	N

APPENDIX D1-1. VAFB - OZONE DEPLETING COMPOUNDS (ODCs) - HISTORICAL TREND



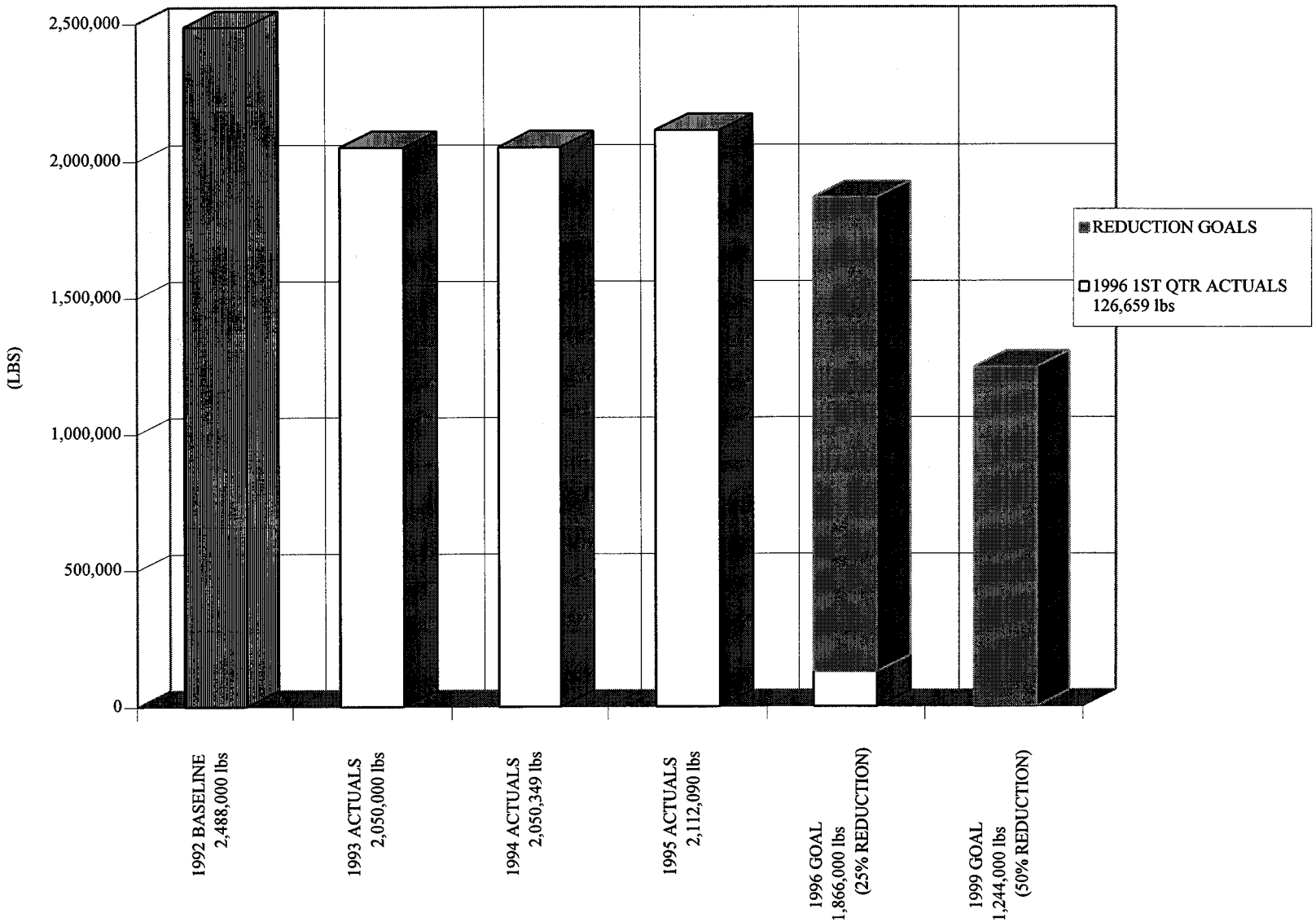
* Note - Supporting data found in appendix C2-1.

APPENDIX D1-2. VAFB EPA-17 CHEMICALS - HISTORICAL TREND



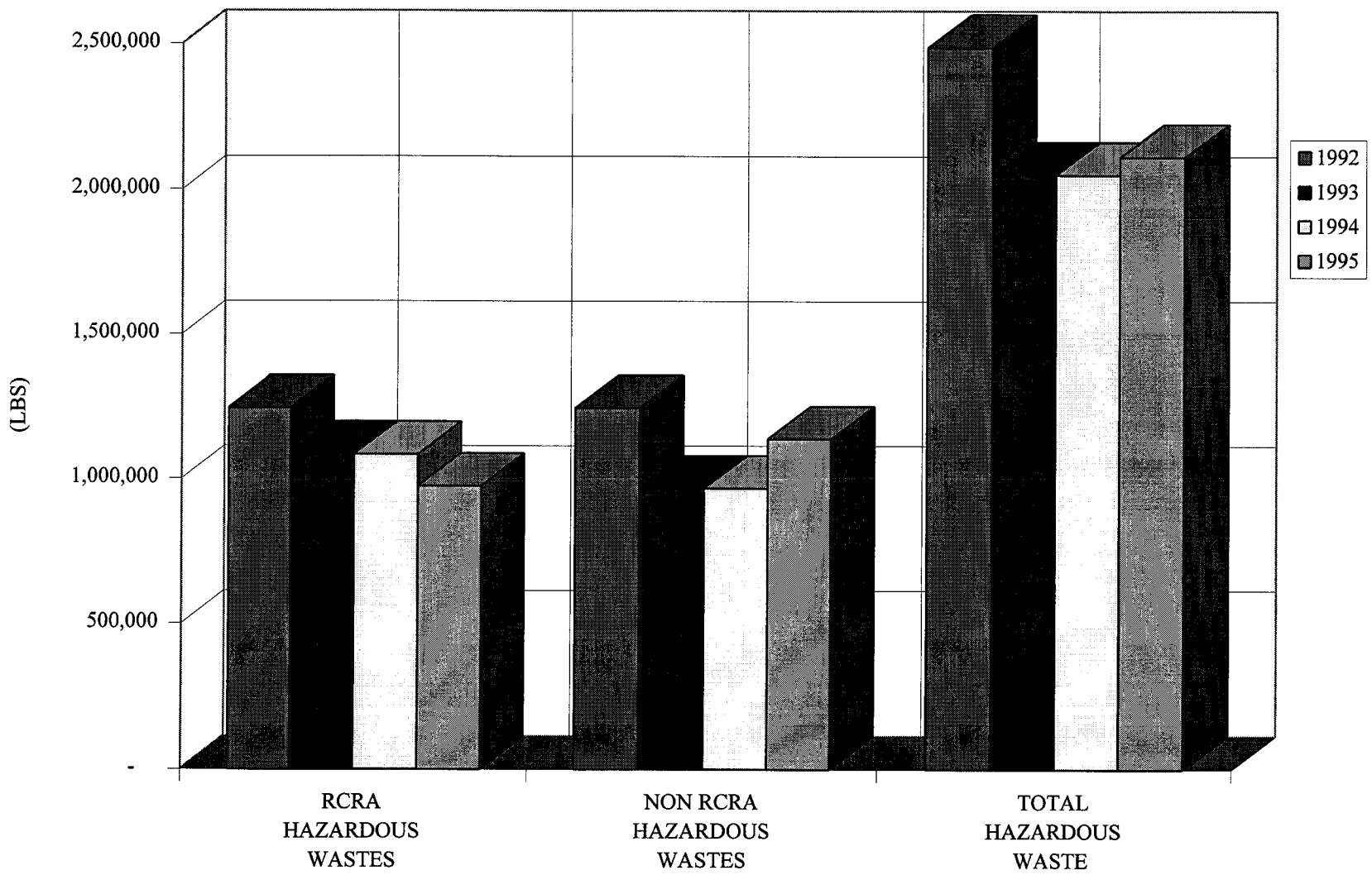
* Note - Supporting data found in appendix C2-2.

APPENDIX D1-3A. VAFB HAZARDOUS WASTE - HISTORICAL TREND



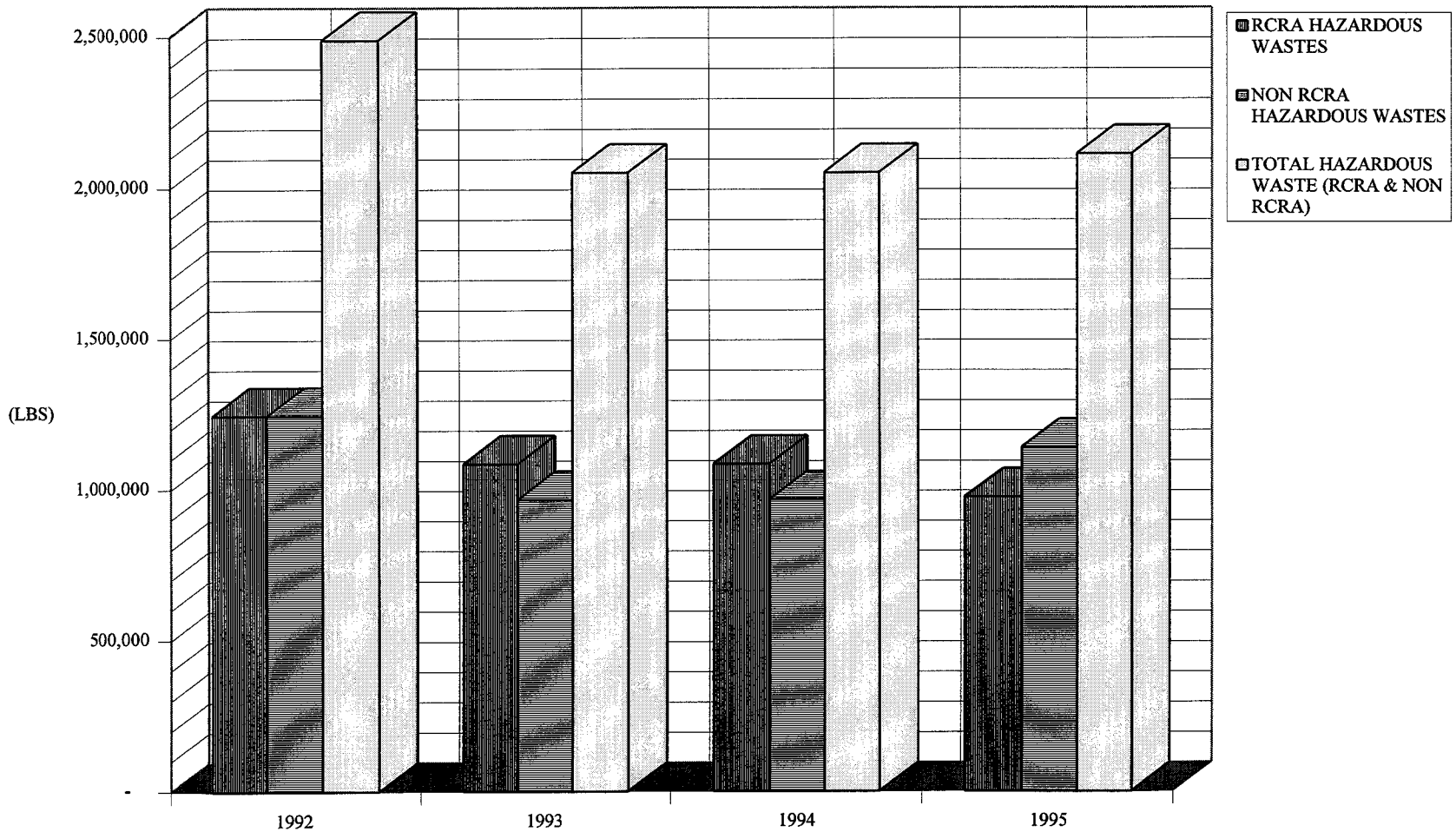
* Note - Supporting data found in appendix C2-3.

APPENDIX D1-3B. VAFB HAZARDOUS WASTE (RCRA & NON RCRA) - HISTORICAL TREND



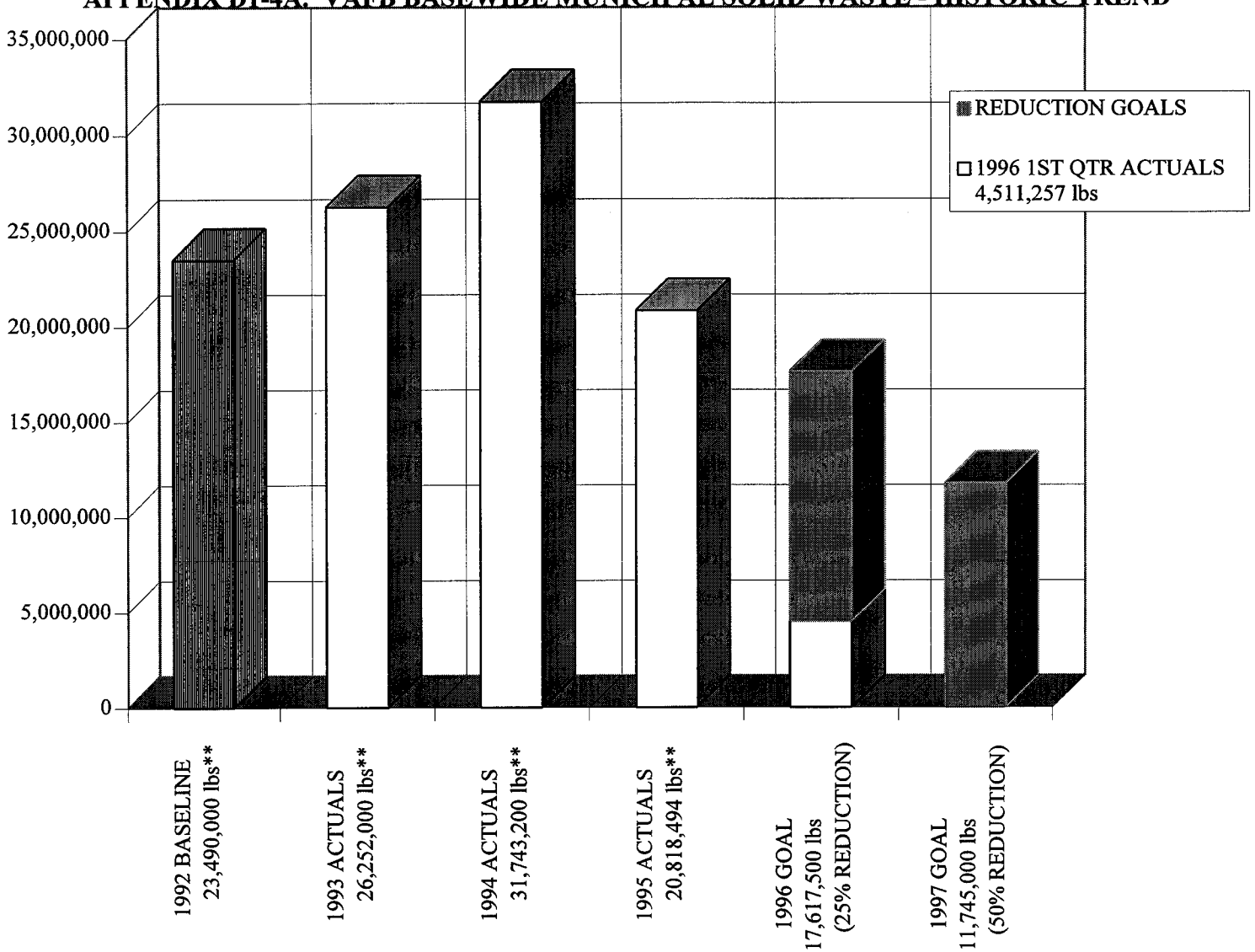
* Note - Supporting data found in appendix C2-3.

APPENDIX D1-3C. VAFB HAZARDOUS WASTE (RCRA & NON RCRA) - HISTORICAL TREND



* Note - Supporting data found in appendix C2-3.

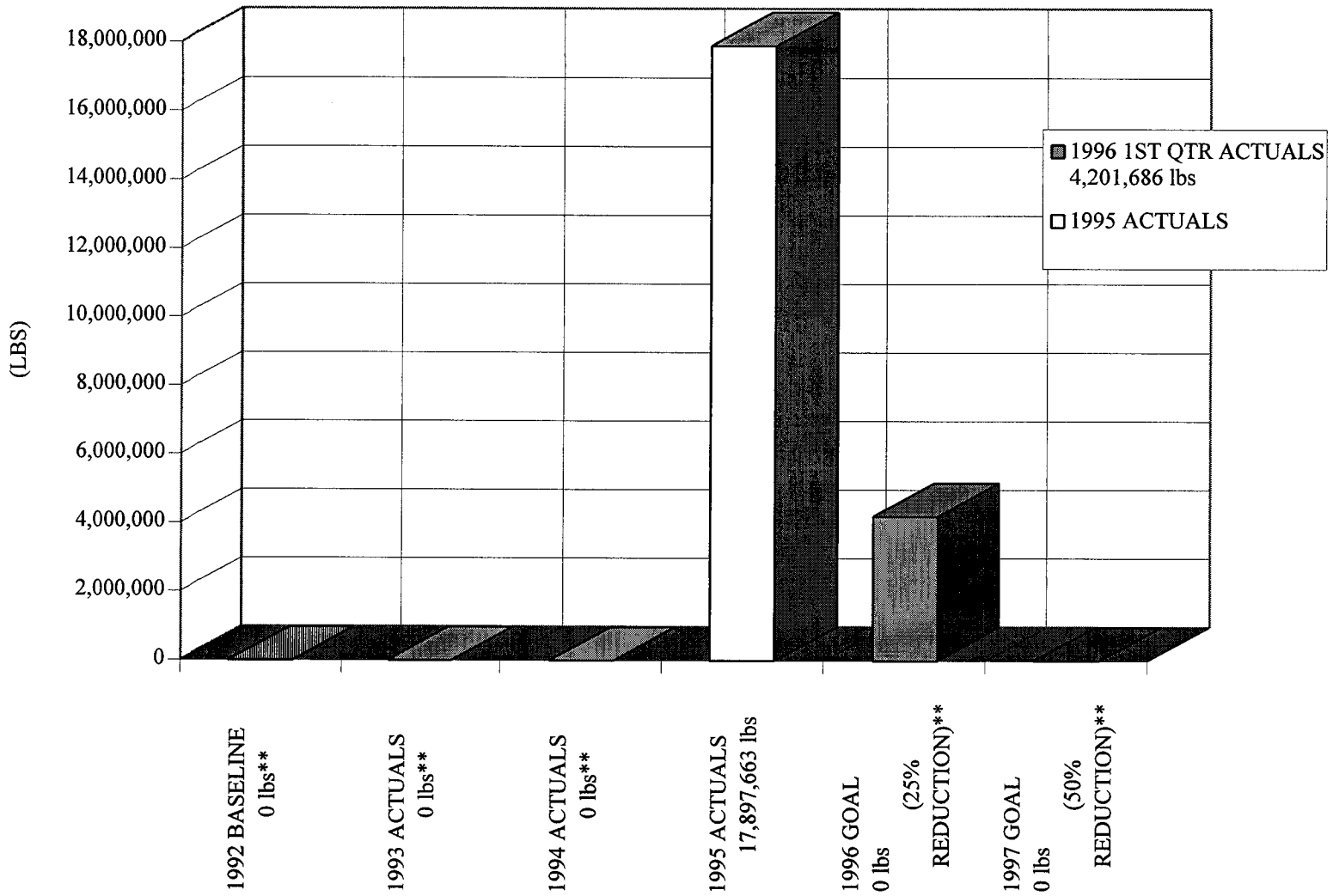
APPENDIX D1-4A. VAFB BASEWIDE MUNICIPAL SOLID WASTE - HISTORIC TREND



* Note - Supporting data found in appendix C2-5.

** Note - Baseline, 1993, and 1994 data derived from MFH only.

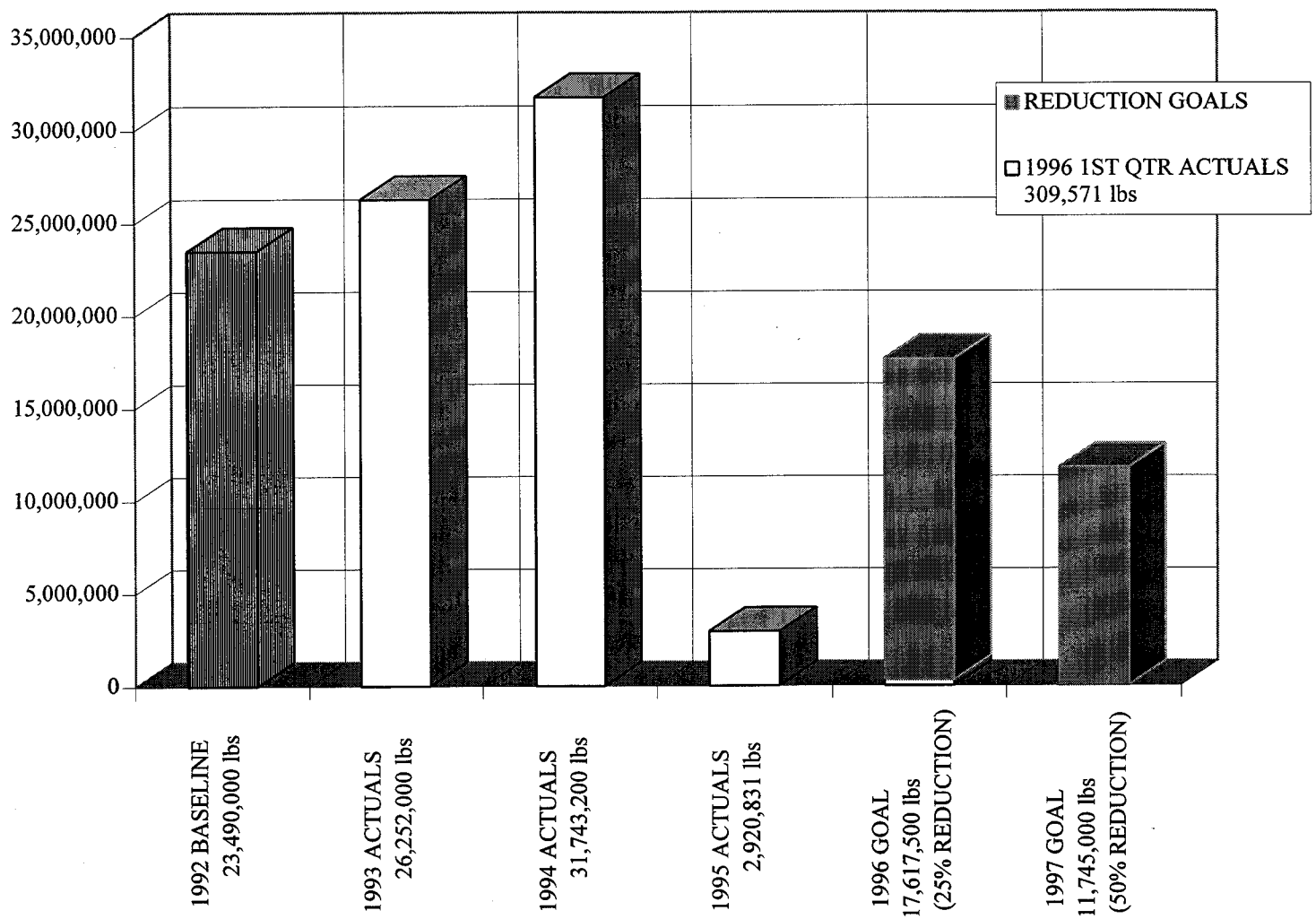
APPENDIX D1-4B. VAFB BASE INDUSTRIAL OPERATIONS MUNICIPAL SOLID WASTE - HISTORIC TREND



* Note - Supporting data found in appendix C2-5.

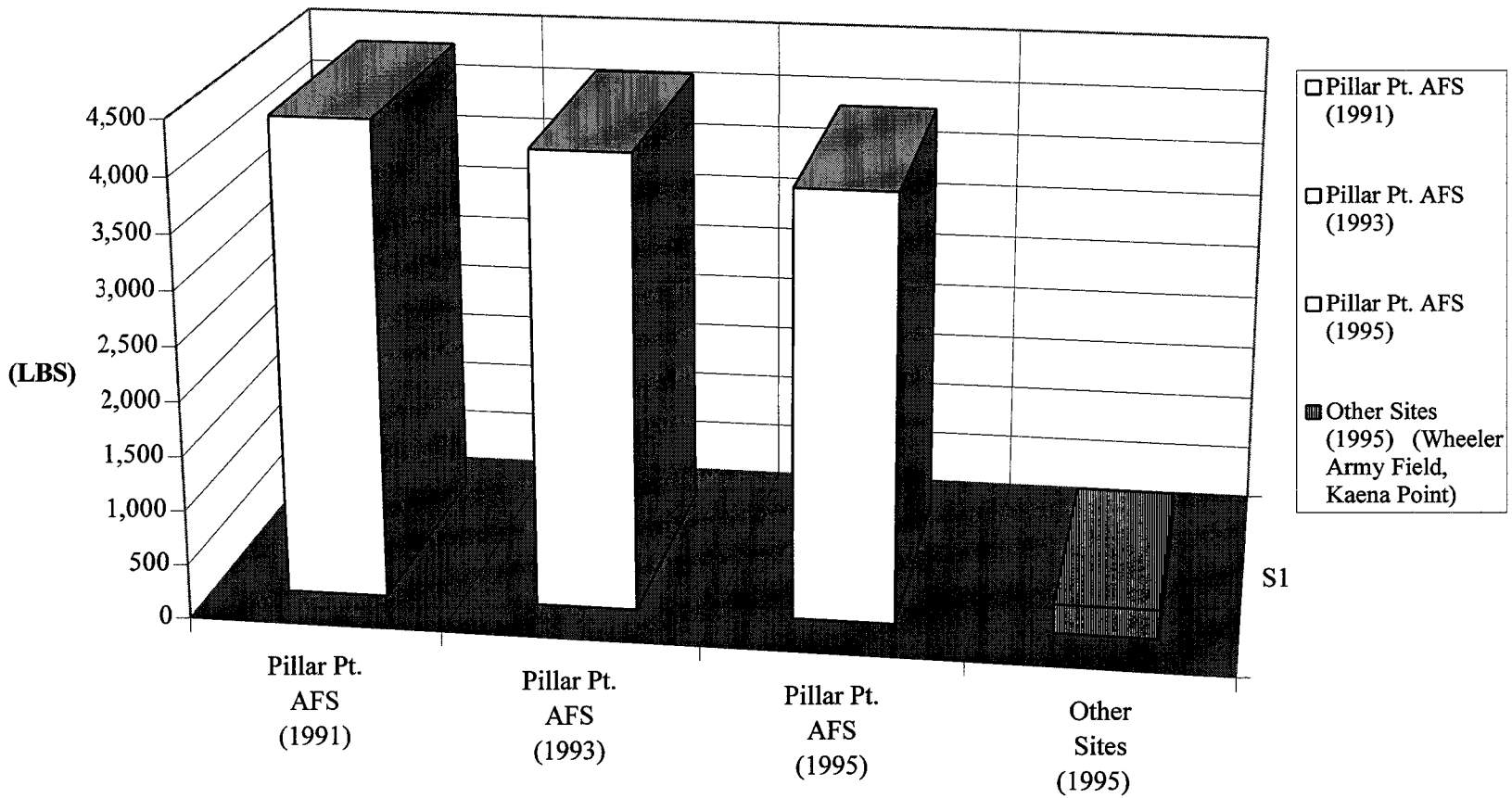
** Note - Baseline, 1993, 1994, and 1996/97 goal data is not available.

APPENDIX D1-4C. VAFB MILITARY FAMILY HOUSING MUNICIPAL SOLID WASTE - HISTORICAL TREND



* Note - Supporting data found in appendix C2-5.

APPENDIX D1-5. 30TH SPACE WING - HAZARDOUS WASTE - REMOTE SITES



* Note - Supporting data found in appendix B1-4.

APPENDIX E1-1. Pollution Prevention Project Validation Matrix (O&S, LI &LII)

Operations and Services Projects

Topic	Valid	Not Valid
A & E Design	• Design cost for current and next FY Level 1 and 2 facility projects • Design cost per MAJCOM instructions	• Design cost for level 3 projects
Baseline Surveys O & S	• Updates to baseline surveys required to support the Pollution Prevention goals and matrices	• Initial accomplishments of surveys are a Level 1 requirement
Civilian Pay O & S	• Permanently assigned personnel performing pollution prevention functions over 50% of the time. The positions must be authorized and funded positions on the organization's Unit Manpower Document (UMD) and coded with a pollution prevention program element code (***54f) • HQ and Command personnel retain the xxx98 program element code with the suffix "x" to identify pollution prevention personnel	• Overhires. interns, or any contracts that exceed MAJCOM work-year and strength. Interns may be paid with pollution prevention functions over 50% of the time, and after internship they can be absorbed within the MAJCOM work-year end strength and will be assigned against an authorized position on the UMD • Personnel associated with hazardous material pharmacy operations
Contractor Support O & S	• Contractor support for specific actions not normal management functions and operations. Project should be identified as the actual action being accomplished, not just "Contractor Support"	• Contractor support to accomplish the normal day-to-day management functions and operations unless the environmental section is a contract operation
EPCRA Reporting O & S	• See this item in the Environmental Compliance section	
Equipment O & S	• Equipment required to support and maintain qualified recycling programs • Equipment required to support and maintain composting programs • Maintenance of equipment for municipal solid waste recycling and composting programs	• Vehicles • Replacement equipment(other than Qualified Recycling Programs and composting programs). PP funds only cover the initial cost of equipment, not the recurring operations, maintenance, and replacement of equipment
Fines or Penalties O & S\	• Supplemental Environmental Projects (SEP) only if the project was previously identified and validated for accomplishment in the subject FY • Funds spent from non-pollution prevention SEP should be moved into the pollution prevention account for accounting purposes	• A Pollution Prevention project identified as a SEP in lieu of a fine or penalty unless the project already was identified and validated for accomplishment in the subject FY
Hazardous Material Pharmacy O & S	• See this item in the Level 1 and 2 Section for valid projects	• Recurring operating costs of a Hazardous Material Pharmacy • Hazardous material response training, equipment and supplies

APPENDIX E1-1. (Continued)

Operations and Services Projects (Continued)

Maintenance O & S	• Equipment maintenance costs for qualified recycling programs and composting programs	• Equipment maintenance costs, other than qualified recycling programs and composting programs • Facility maintenance costs • Projects to remedy poor infrastructure maintenance
Opportunity Assessments (OA's) O & S	• Conducting or updating OAs on periodic basis (e.g. once every third year) or when significant mission change warrants	• Frequent (annual) updates of these plans by contract are not valid. Periodic reviews and updates should be accomplished in-house unless there are sufficient changes to warrant the cost to accomplish this work via contract
Pollution Prevention Management Plans O & S	• Updating Pollution Prevention Management Plans on periodic basis (e.g. once every third year) or when significant mission change warrants	• Frequent (annual) updates of these plans by contract are not valid. Periodic reviews and updates should be accomplished in-house unless there are sufficient changes to warrant the cost to accomplish this work via contract • Initial development is accomplished as a Level 1 requirement
Recycling and Composting O & S	• Recurring costs to operate Qualified Recycling Programs (QPRs) and composting programs • PP funds should only be used to cover the difference between program expenses and program proceeds	• Rag cleaning contracts • "Safety Kleen" and other contract solvent recycling systems • Proceeds from recycling operations MUST first be used to cover program expenses, to include reimbursing any appropriated funds (such as PP funds) • Operating costs for non-QRP, such as hazardous material recycling associated with hazardous waste minimization, refrigerant/halon recovery/recycling, and construction debris recycling • Grounds maintenance equipment
Supplies Office O & S	• Reasonable amount for office supplies if a separate pollution prevention office has been established • Supplies over $200 per authorized pollution prevention person per year are highly questionable	• Supplies to support Hazardous Material Pharmacy operations
TDY and Training O & S	• Training required by law • Training for installation personnel to accomplish opportunity assessments (OAs) • Non-specific training at base level that exceeds an average of $1,000 per full-time equivalent in pollution prevention per year is highly questionable (USAFE & PACAF $2,000) • Training associated with implementing HAZMAT pharmacies	• Training not required for pollution prevention initiatives is not valid • Training to meet OSHA requirements

APPENDIX E1-1. (Continued)

Level 1 And 2 Items

Topic	Valid	Not Valid
Acquisition Projects	• Projects not associated with any one acquisition program, but support the infrastructure of many programs. Projects will not be accomplished by program offices	• Acquisition projects associated with any one acquisition program
Alternative Fueled Vehicles (AFVs)	• AFV infrastructure and vehicle conversion projects to meet established Air Force or DoD goals if sufficient funding is not available through special DoD and DOE allocations	• PP funding should only be used for AFV projects to meet established goals once the MAJCOM has determined the special funding from DoD and DOE will be insufficient. Any efforts in this area must be coordinated closely with the LG community because they are the lead in determining how the Air Force will meet Energy Policy Act and Executive Order AFV requirements
Baseline Surveys	• Completing initial baseline surveys required to support the Pollution Prevention Program and established goals and metrics are Level 1 requirements	• Updates to baseline surveys are an O & S requirement
Energy and Water Conservation		• Energy and water conservation projects should be submitted through the Energy Conservation Investment Program (ECIP) and the Federal Energy Management Program (FEMP)
EPA-17	• Projects to meet established goals to reduce the purchases of EPA-17 chemicals (also see Equipment below)	• Recycling equipment when a viable source reduction project can be implemented instead • Treatment or "control" type efforts
EPCRA	• Equipment and process changes to meet goals for reduced releases and off-site transfers of toxic chemicals from the 1994 toxic reduction inventory baseline	• Recycling/reuse equipment for hazardous materials when a viable source reduction alternative exists • Treatment or "control" type efforts
Equipment	• Equipment to start-up a municipal solid waste recycling program • Equipment to start-up a composting program • Equipment primarily justified to convert from an environmentally unfriendly process or material to a more environmentally friendly process or material. Equipment specifically must support efforts to meet an established pollution prevention mandate or goal • Equipment necessary to implement a hazardous material pharmacy	• Vehicles • Replacement, maintenance, and operation of equipment, except municipal solid waste and composting • Recycling/reuse equipment for hazardous materials when a viable source reduction alternative exists • Projects primarily justified for non-environmental reasons, even if they may satisfy environmental requirements • Depot level equipment other then initial prototypes • Treatment or "control" type efforts

APPENDIX E1-1. (Continued)

Level 1 And 2 Items (Continued)

Hazardous Material Pharmacy	• Initial costs to establish a hazardous material pharmacy, including facilities and equipment	• Recurring operating costs of a hazardous material pharmacy • Hazardous material response training, equipment, and supplies • Replacement equipment or additional equipment required after the pharmacy is implemented
Hazardous Waste Minimization	• Initial cost to implement source reduction efforts necessary to meet established PP hazardous waste minimization goals • Initial purchase of equipment to support reusing/recycling hazardous material instead of disposal only if there is no viable source reduction alternative	• Rag cleaning contracts • "Safety Kleen" and other contract solvent recycling systems • Solvent recycling equipment when a viable source reduction project can be implemented instead • Treatment or "control" type efforts
Ozone Depleting Substances (ODSs)	• Projects to reduce or eliminate the Air Force's need and use of ODSs	• Projects to replace halon fire protection systems with non-halon systems • Projects to replace hand-held halon fire extinguishers • Replacing or retrofitting air conditioning systems • Solvent recycling equipment when a viable source reduction project can be implemented instead • Treatment or "control" type efforts
Pesticides and Herbicides	• Source reduction projects to meet established Air Force goals for reduced application of pesticides and herbicides	• Equipment or process changes not specifically undertaken as an initiative to meet pesticide and herbicide application reduction goals
Pollution Prevention Management Plan	• Initial cost to develop a Pollution Prevention Management Plan`	• Updates are accomplished as an O & S requirement