Appendix I to 40 CFR Part 265 -- Recordkeeping Instructions

The recordkeeping provisions of § 265.73 specify that an owner or operator must keep a written operating record at his or her facility. This appendix provides additional instructions for keeping portions of the operating record. See § 265.73(b) for additional recordkeeping requirements.

The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility in the following manner:

Records of each hazardous waste received, treated, stored, or disposed of at the facility which include the following:

(1) A description by its common name and the EPA Hazardous Waste Number(s) from part 261 of this chapter which apply to the waste. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in part 261, subpart D, of this chapter, the description also must include the process that produced it (for example, solid filter cake from production of -- -- -- , EPA Hazardous Waste Number W051).

Each hazardous waste listed in part 261, subpart D, of this chapter, and each hazardous waste characteristic defined in part 261, subpart C, of this chapter, has a four-digit EPA Hazardous Waste Number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA Hazardous Waste Numbers.

(2) The estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1; and

Table 1

Unit of measure	Code[1]
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V
Short Tons Per Hour	D

Metric Tons Per Hour	W
Short Tons Per Day	N
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	R
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu's per Hour	I

FOOTNOTE: [1]Single digit symbols are used here for data processing purposes.

(3) The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal.

Table 2.-Handling Codes for Treatment, Storage and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store or dispose of each quantity of hazardous waste received.

1. Storage

S01 Container (barrel, drum, etc.)

S02 Tank

S03 Waste Pile

S04 Surface Impoundment

S05 Drip Pad

S06 Containment Building (Storage)

S99 Other Storage (specify)

2. Treatment

(a) Thermal Treatment--

T06 Liquid injection incinerator

T07 Rotary kiln incinerator

T08 Fluidized bed incinerator

T09 Multiple hearth incinerator

T10 Infrared furnace incinerator

T11 Molten salt destructor

T12 Pyrolysis

T13 Wet Air oxidation

T14 Calcination

T15 Microwave discharge

T18 Other (specify)

(b) Chemical Treatment--

T19 Absorption mound

T20 Absorption field

T21 Chemical fixation

T22 Chemical oxidation

T23 Chemical precipitation

T24 Chemical reduction

T25 Chlorination

T26 Chlorinolysis

T27 Cyanide destruction

T28 Degradation

T29 Detoxification

T30 Ion exchange

T31 Neutralization

T32 Ozonation

T33 Photolysis

T34 Other (specify)

(c) Physical Treatment--

(1) Separation of components

T35 Centrifugation

T36 Clarification

T37 Coagulation

T38 Decanting

T39 Encapsulation

T40 Filtration

T41 Flocculation

T42 Flotation

T43 Foaming

T44 Sedimentation

T45 Thickening

T46 Ultrafiltration

T47 Other (specify)

(2) Removal of Specific Components

T48 Absorption-molecular sieve

T49 Activated carbon

T50 Blending

T51 Catalysis

T52 Crystallization

T53 Dialysis

T54 Distillation

T55 Electrodialysis

T56 Electrolysis

T57 Evaporation

T58 High gradient magnetic separation

T59 Leaching

T60 Liquid ion exchange

T61 Liquid-liquid extraction

T62 Reverse osmosis

T63 Solvent recovery

T64 Stripping

T65 Sand filter

T66 Other (specify)

(d) Biological Treatment

T67 Activated sludge

T68 Aerobic lagoon

T69 Aerobic tank

T70 Anaerobic tank

T71 Composting

T72 Septic tank

T73 Spray irrigation

T74 Thickening filter

T75 Tricking filter

T76 Waste stabilization pond

T77 Other (specify)

T78 [Reserved]

T79 [Reserved]

(e) Boilers and Industrial Furnaces

T80 Boiler

T81 Cement Kiln

T82 Lime Kiln

T83 Aggregate Kiln

T84 Phosphate Kiln

T85 Coke Oven

T86 Blast Furnace

T87 Smelting, Melting, or Refining Furnace

T88 Titanium Dioxide Chloride Process Oxidation Reactor

T89 Methane Reforming Furnace

T90 Pulping Liquor Recovery Furnace

T91 Combustion Device Used in the Recovery of Sulfur Values From Spent Sulfuric Acid

T92 Halogen Acid Furnaces

T93 Other Industrial Furnaces Listed in 40 CFR 260.10 (specify)

(f) Other Treatment

T94 Containment Building (Treatment)

3. Disposal

D79 Underground Injection

D80 Landfill

D81 Land Treatment

D82 Ocean Disposal

D83 Surface Impoundment (to be closed as a landfill)

D99 Other Disposal (specify)

4. Miscellaneous (Subpart X)

X01 Open Burning/Open Detonation

X02 Mechanical Processing

X03 Thermal Unit

X04 Geologic Repository

X99 Other Subpart X (specify)

Appendix III to Part 265 -- EPA Interim Primary Drinking Water Standards

Parameter	Maximum level (mg/l)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Fluoride	1.4-2.4
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1
2,4,5-TP Silver	0.01
Radium	5 pCi/1
Gross Alpha	15 pCi/1
Gross Beta	4 millirem/yr
Turbidity	1/TU
Coliform Bacteria	1/100 ml

Comment: Turbidity is applicable only to surface water supplies.

Appendix IV to Part 265 -- Tests for Significance

As required in § 265.93(b) the owner or operator must use the Student's t-test to determine statistically significant changes in the concentration or value of an indicator parameter in periodic ground-water samples when compared to the initial background concentration or value of that indicator parameter. The comparison must consider individually each of the wells in the monitoring system. For three of the indicator parameters (specific conductance, total organic carbon, and total organic halogen) a single-tailed Student's t-test must be used to test at the 0.01 level of significance for significant increases over background. The difference test for pH must be a two-tailed Student's t-test at the overall 0.01 level of significance.

The student's t-test involves calculation of the value of a t-statistic for each comparison of the mean (average) concentration or value (based on a minimum of four replicate measurements) of an indicator parameter with its initial background concentration or value. The calculated value of the t-statistic must then be compared to the value of the t-statistic found in a table for t-test of significance at the specified level of significance. A calculated value of t which exceeds the value of t found in the table indicates a statistically significant change in the concentration or value of the indicator parameter.

Formulae for calculation of the t-statistic and tables for t-test of significance can be found in most introductory statistics texts.

Appendix V to Part 265 -- Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Akaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalines	

Lime wastewater	Pickling liquor and other corrosive acids
Lime and water	Spent acid
Spent caustic	Spent mixed acid
	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium Calcium Lithium Magnesium Potassium Sodium Zinc powder Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium Lithium Metal hydrides Potassium SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3 Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B

Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes Halogenated hydrocarbons Nitrated hydrocarbons Unsaturated hydrocarbons Other reactive organic compounds and solvents	Group 2-A wastes

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acids
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hyphochlorites	Other flammable and combustible wastes
Nitrates Nitric acid, fuming Perchlorates Permanganates Peroxides Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

Appendix VI to Part 265--Compounds With Henry's Law Constant Less Than 0.1 Y/X

Compound name	CAS No.
Acetaldol	107-89-1
Acetamide	60-35-5
2-Acetylaminofluorene	53-96-3
3-Acetyl-5-hydroxypiperidine	
3-Acetylpiperidine	618-42-8
1-Acetyl-2-thiourea	591-08-2
Acrylamide	79-06-1
Acrylic acid	79-10-7
Adenine	73-24-5
Adipic acid	124-04-9
Adiponitrile	111-69-3
Alachlor	15972-60-8
Aldicarb	116-06-3
Ametryn	834-12-8
4-Aminobiphenyl	92-67-1
4-Aminopyridine	504-24-5
Aniline	62-53-3
o-Anisidine	90-04-0
Anthraquinone	84-65-1
Atrazine	1912-24-9
Benzenearsonic acid	98-05-5
Benzenesulfonic acid	98-11-3
Benzidine	92-87-5
Benzo(a)anthracene	56-55-3
Benzo(k)fluoranthene	207-08-9
Benzoic acid	65-85-0
Benzo(g,h,i)perylene	191-24-2
Benzo(a)pyrene	50-32-8
Benzyl alcohol	100-51-6
gamma-BHC	58-89-9
Bis(2-ethylhexyl)phthalate	117-81-7
Bromochloromethyl acetate	
Bromoxynil	1689-84-5
Butyric acid	107-92-6
Caprolactam (hexahydro-2H-azepin-2-one)	105-60-2
Catechol (o-dihydroxybenzene)	120-80-9
Cellulose	9004-34-6
Cell wall	
Chlorhydrin (3-Chloro-1,2-propanediol)	96-24-2
Chloroacetic acid	79-11-8
2-Chloroacetophenone	93-76-5
p-Chloroaniline	106-47-8

p-Chlorobenzophenone..... 134-85-0
Chlorobenzilate..... 510-15-6
p-Chloro-m-cresol (6-chloro-m-cresol)..... 59-50-7
3-Chloro-2,5-diketopyrrolidine.....
Chloro-1,2-ethane diol.....
4-Chlorophenol..... 106-48-9
Chlorophenol polymers (2-chlorophenol & 4-chlorophenol) 95-57-8 & 106-48-9
1-(o-Chlorophenyl)thiourea..... 5344-82-1
Chrysene..... 218-01-9
Citric acid..... 77-92-9
Creosote..... 8001-58-9
m-Cresol..... 108-39-4
o-Cresol..... 95-48-7
p-Cresol..... 106-44-5
Cresol (mixed isomers)..... 1319-77-3
4-Cumylphenol..... 27576-86
Cyanide..... 57-12-5
4-Cyanomethyl benzoate.....
Diazinon..... 333-41-5
Dibenzo(a,h)anthracene..... 53-70-3
Dibutylphthalate..... 84-74-2
2,5-Dichloroaniline (N,N'-dichloroaniline)..... 95-82-9
2,6-Dichlorobenzonitrile11..... 1194-65-6
2,6-Dichloro-4-nitroaniline..... 99-30-9
2,5-Dichlorophenol..... 333-41-5
3,4-Dichlorotetrahydrofuran..... 3511-19
Dichlorvos (DDVP)..... 62737
Diethanolamine..... 111-42-2
N,N-Diethylaniline..... 91-66-7
Diethylene glycol..... 111-46-6
Diethylene glycol dimethyl ether (dimethyl Carbitol).... 111-96-6
Diethylene glycol monobutyl ether (butyl Carbitol)..... 112-34-5
Diethylene glycol monoethyl ether acetate (Carbitol acetate)..... 112-15-2
Diethylene glycol monoethyl ether (Carbitol Cellosolve). 111-90-0
Diethylene glycol monomethyl ether (methyl Carbitol).... 111-77-3
N,N'-Diethylhydrazine..... 1615-80-1
Diethyl (4-methylumbelliferyl) thionophosphate..... 299-45-6
Diethyl phosphorothioate..... 126-75-0
N,N'-Diethylpropionamide..... 15299-99-7
Dimethoate..... 60-51-5
2,3-Dimethoxystrychnidin-10-one..... 357-57-3
4-Dimethylaminoazobenzene..... 60-11-7
7,12-Dimethylbenz(a)anthracene..... 57-97-6
3,3-Dimethylbenzidine..... 119-93-7
Dimethylcarbamoyl chloride..... 79-44-7
Dimethyldisulfide..... 624-92-0
Dimethylformamide..... 68-12-2
1,1-Dimethylhydrazine..... 57-14-7
Dimethylphthalate..... 131-11-3
Dimethylsulfone..... 67-71-0

Dimethylsulfoxide..... 67-68-5
4,6-Dinitro-o-cresol..... 534-52-1
1,2-Diphenylhydrazine..... 122-66-7
Dipropylene glycol (1,1'-oxydi-2-propanol)..... 110-98-5
Endrin..... 72-20-8
Epinephrine..... 51-43-4
mono-Ethanolamine..... 141-43-5
Ethyl carbamate (urethane)..... 5-17-96
Ethylene glycol..... 107-21-1
Ethylene glycol monobutyl ether (butyl Cellosolve)..... 111-76-2
Ethylene glycol monoethyl ether (Cellosolve)..... 110-80-5
Ethylene glycol monoethyl ether acetate (Cellosolve acetate)..... 111-15-9
Ethylene glycol monomethyl ether (methyl Cellosolve).... 109-86-4
Ethylene glycol monophenyl ether (phenyl Cellosolve).... 122-99-6
Ethylene glycol monopropyl ether (propyl Cellosolve)... 2807-30-9
Ethylene thiourea (2-imidazolidinethione)..... 9-64-57
4-Ethylmorpholine..... 100-74-3
3-Ethylphenol..... 620-17-7
Fluoroacetic acid, sodium salt..... 62-74-8
Formaldehyde..... 50-00-0
Formamide..... 75-12-7
Formic acid..... 64-18-6
Fumaric acid..... 110-17-8
Glutaric acid..... 110-94-1
Glycerin (Glycerol)..... 56-81-5
Glycidol..... 556-52-5
Glycinamide..... 598-41-4
Glyphosate..... 1071-83-6
Guthion..... 86-50-0
Hexamethylene-1,6-diisocyanate (1,6-diisocyanatohexane). 822-06-0
Hexamethyl phosphoramide..... 680-31-9
Hexanoic acid..... 142-62-1
Hydrazine..... 302-01-2
Hydrocyanic acid..... 74-90-8
Hydroquinone..... 123-31-9
Hydroxy-2-propionitrile (hydracrylonitrile)..... 109-78-4
Indeno (1,2,3-cd) pyrene..... 193-39-5
Lead acetate..... 301-04-2
Lead subacetate (lead acetate, monobasic)..... 1335-32-6
Leucine..... 61-90-5
Malathion..... 121-75-5
Maleic acid..... 110-16-7
Maleic anhydride..... 108-31-6
Mesityl oxide..... 141-79-7
Methane sulfonic acid..... 75-75-2
Methomyl..... 16752-77-5
p-Methoxyphenol..... 150-76-5
Methyl acrylate..... 96-33-3
4,4'-Methylene-bis-(2-chloroaniline)..... 101-14-4
4,4'-Methylenediphenyl diisocyanate (diphenyl methane diisocyanate)..... 101-68-8

4,4'-Methylenedianiline..... 101-77-9
Methylene diphenylamine (MDA).....
5-Methylfurfural..... 620-02-0
Methylhydrazine..... 60-34-4
Methyliminoacetic acid.....
Methyl methane sulfonate..... 66-27-3
1-Methyl-2-methoxyaziridine.....
Methylparathion..... 298-00-0
Methyl sulfuric acid (sulfuric acid, dimethyl ester)..... 77-78-1
4-Methylthiophenol..... 106-45-6
Monomethylformamide (N-methylformamide)..... 123-39-7
Nabam..... 142-59-6
alpha-Naphthol..... 90-15-3
beta-Naphthol..... 135-19-3
alpha-Naphthylamine..... 134-32-7
beta-Naphthylamine..... 91-59-8
Neopentyl glycol (dimethylolpropane)..... 126-30-7
Niacinamide..... 98-92-0
o-Nitroaniline..... 88-74-4
Nitroglycerin..... 55-63-0
2-Nitrophenol..... 88-75-5
4-Nitrophenol..... 100-02-7
N-Nitrosodimethylamine..... 62-75-9
Nitrosoguanidine..... 674-81-7
N-Nitroso-n-methylurea..... 684-93-5
N-Nitrosomorpholine (4-nitrosomorpholine)..... 59-89-2
Oxalic acid..... 144-62-7
Parathion..... 56-38-2
Pentaerythritol..... 115-77-5
Phenacetin..... 62-44-2
Phenol..... 108-95-2
Phenylacetic acid..... 103-82-2
m-Phenylene diamine..... 108-45-2
o-Phenylene diamine..... 95-54-5
p-Phenylene diamine..... 106-50-3
Phenyl mercuric acetate..... 62-38-4
Phorate..... 298-02-2
Phthalic anhydride..... 85-44-9
alpha-Picoline (2-methyl pyridine)..... 109-06-8
1,3-Propane sulfone..... 1120-71-4
beta-Propiolactone..... 57-57-8
Proporur (Baygon).....
Propylene glycol..... 57-55-6
Pyrene..... 129-00-0
Pyridinium bromide..... 39416-48-3
Quinoline..... 91-22-5
Quinone (p-benzoquinone)..... 106-51-4
Resorcinol..... 108-46-3
Simazine..... 122-34-9
Sodium acetate..... 127-09-3
Sodium formate..... 141-53-7
Strychnine..... 57-24-9

Succinic acid	110-15-6
Succinimide	123-56-8
Sulfanilic acid	121-47-1
Terephthalic acid	100-21-0
Tetraethyldithiopyrophosphate	3689-24-5
Tetraethylenepentamine	112-57-2
Thiofanox	39196-18-4
Thiosemicarbazide	79-19-6
2,4-Toluenediamine	95-80-7
2,6-Toluenediamine	823-40-5
3,4-Toluenediamine	496-72-0
2,4-Toluene diisocyanate	584-84-9
p-Toluic acid	99-94-5
m-Toluidine	108-44-1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
Triethanolamine	102-71-6
Triethylene glycol dimethyl ether	
Tripropylene glycol	24800-44-0
Warfarin	81-81-2
3,4-Xylenol (3,4-dimethylphenol)	95-65-8