

Name of Waste (as described on the Material Characterization Form – MCF): _____

PLEASE NOTE: In order to profile waste into Covanta's Virginia facilities, this form must be completed in its entirety for permit compliance purposes. Review the list of HAPS below, answer questions 1-3 at the end of this document, sign and date the form. Submit this form with the completed Covanta Material Characterization Form and supporting analysis to Covanta, if applicable.

List of Hazardous Air Pollutants per 9-VA 5-60-100 (40 CFR 63)

75-07-0	<u>Acetaldehyde</u>	7647-01-0	Hydrochloric acid
60-35-5	<u>Acetamide</u>	7664-39-3	Hydrogen fluoride (Hydrofluoric acid)
75-05-8	<u>Acetonitrile</u>	123-31-9	<u>Hydroquinone</u>
98-86-2	<u>Acetophenone (Methyl Phenyl Ketone)</u>	78-59-1	<u>Isophorone</u>
53-96-3	<u>2-Acetylaminofluorene</u>	58-89-9	<u>Lindane (all isomers)</u>
107-02-8	<u>Acrolein</u>	108-31-6	<u>Maleic anhydride</u>
79-06-1	<u>Acrylamide</u>	67-56-1	<u>Methanol</u>
79-10-7	<u>Acrylic acid</u>	72-43-5	<u>Methoxychlor</u>
107-13-1	<u>Acrylonitrile</u>	74-83-9	<u>Methyl bromide (Bromomethane)</u>
107-05-1	<u>Allyl chloride (3-Chloropropene)</u>	74-87-3	<u>Methyl chloride (Chloromethane)</u>
92-67-1	<u>4-Aminobiphenyl</u>	71-55-6	<u>Methyl chloroform (1,1,1-Trichloroethane)</u>
62-53-3	<u>Aniline</u>	78-93-3	<u>Methyl ethyl ketone (2-Butanone or MEK)</u>
90-04-0	<u>o-Anisidine</u>	60-34-4	<u>Methyl hydrazine</u>
1332-21-4	<u>Asbestos</u>	74-88-4	<u>Methyl iodide (Iodomethane)</u>
71-43-2	<u>Benzene (including benzene from gasoline)</u>	108-10-1	<u>Methyl isobutyl ketone (Hexone or MIBK)</u>
92-87-5	<u>Benzidine</u>	624-83-9	<u>Methyl isocyanate</u>
98-07-7	<u>Benzotrichloride</u>	80-62-6	<u>Methyl methacrylate</u>
100-44-7	<u>Benzyl chloride</u>	1634-04-4	<u>Methyl tert-butyl ether</u>
92-52-4	<u>Biphenyl</u>	101-14-4	<u>4,4'-Methylene bis(2-chloroaniline)</u>
117-81-7	<u>Bis(2-ethylhexyl)phthalate (DEHP)</u>	75-09-2	<u>Methylene chloride (Dichloromethane)</u>
542-88-1	<u>Bis(chloromethyl)ether</u>	101-68-8	<u>Methylene diphenyl diisocyanate (MDI)</u>
75-25-2	<u>Bromoform (Tribromomethane)</u>	101-77-9	<u>4,4'-Methylenedianiline</u>
106-99-0	<u>1,3-Butadiene</u>	91-20-3	<u>Naphthalene</u>
156-62-7	<u>Calcium cyanamide</u>	98-95-3	<u>Nitrobenzene</u>
133-06-2	<u>Captan</u>	92-93-3	<u>4-Nitrobiphenyl</u>
63-25-2	<u>Carbaryl</u>	100-02-7	<u>4-Nitrophenol</u>
75-15-0	<u>Carbon disulfide</u>	79-46-9	<u>2-Nitropropane</u>
56-23-5	<u>Carbon tetrachloride (Tetrachloromethane)</u>	684-93-5	<u>N-Nitroso-N-methylurea</u>
463-58-1	<u>Carbonyl sulfide</u>	62-75-9	<u>N-Nitrosodimethylamine</u>
120-80-9	<u>Catechol</u>	59-89-2	<u>N-Nitrosomorpholine</u>
133-90-4	<u>Chloramben</u>	56-38-2	<u>Parathion</u>
57-74-9	<u>Chlordane</u>	82-68-8	<u>Pentachloronitrobenzene (Quintobenzene)</u>
7782-50-5	<u>Chlorine</u>	87-86-5	<u>Pentachlorophenol</u>
79-11-8	<u>Chloroacetic acid</u>	108-95-2	<u>Phenol</u>
532-27-4	<u>2-Chloroacetophenone</u>	106-50-3	<u>p-Phenylenediamine</u>
108-90-7	<u>Chlorobenzene</u>	75-44-5	<u>Phosgene</u>
510-15-6	<u>Chlorobenzilate</u>	7803-51-2	<u>Phosphine</u>
67-66-3	<u>Chloroform (Trichloromethane)</u>	7723-14-0	<u>Phosphorus</u>
107-30-2	<u>Chloromethyl methyl ether</u>	85-44-9	<u>Phthalic anhydride</u>
126-99-8	<u>Chloroprene</u>	1336-36-3	<u>Polychlorinated biphenyls (Aroclors)</u>
1319-77-3	<u>Cresols/Cresylic acid (isomers and mixture)</u>	1120-71-4	<u>1,3-Propane sultone</u>
95-48-7	<u>o-Cresol</u>	57-57-8	<u>beta-Propiolactone</u>
108-39-4	<u>m-Cresol</u>	123-38-6	<u>Propionaldehyde</u>
106-44-5	<u>p-Cresol</u>	114-26-1	<u>Propoxur (Baygon)</u>
98-82-8	<u>Cumene</u>	78-87-5	<u>Propylene dichloride (1,2-Dichloropropane)</u>
94-75-7	<u>2,4-D, salts and esters</u>	75-56-9	<u>Propylene oxide</u>
601-64-9	<u>Dichlorodiphenyldichloroethylene (DDE)</u>	75-55-8	<u>1,2-Propylenimine (2-Methyl aziridine)</u>
334-88-3	<u>Diazomethane</u>	91-22-5	<u>Quinoline</u>
132-64-9	<u>Dibenzofurans</u>	106-51-4	<u>Quinone</u>
96-12-8	<u>1,2-Dibromo-3-chloropropane (DBCP)</u>	100-42-5	<u>Styrene</u>
84-74-2	<u>Dibutylphthalate</u>	96-09-3	<u>Styrene oxide</u>

106-46-7	<u>1,4-Dichlorobenzene (p-Dichlorobenzene)</u>	1746-01-6	<u>2,3,7,8-Tetrachlorodibenzo-p-dioxin</u>
91-94-1	<u>3,3'-Dichlorobenzidine</u>	79-34-5	<u>1,1,2,2-Tetrachloroethane</u>
111-44-4	<u>Dichloroethyl ether (Bis(2-chloroethyl)ether)</u>	127-18-4	<u>Tetrachloroethylene (Perchloroethylene)</u>
542-75-6	<u>1,3-Dichloropropene</u>	7550-45-0	<u>Titanium tetrachloride</u>
62-73-7	<u>Dichlorvos</u>	108-88-3	<u>Toluene</u>
111-42-2	<u>Diethanolamine</u>	95-80-7	<u>2,4-Toluene diamine</u>
64-67-5	<u>Diethyl sulfate</u>	584-84-9	<u>2,4-Toluene diisocyanate</u>
119-90-4	<u>3,3'-Dimethoxybenzidine</u>	95-53-4	<u>o-Toluidine</u>
60-11-7	<u>Dimethyl aminoazobenzene</u>	8001-35-2	<u>Toxaphene (chlorinated camphene)</u>
119-93-7	<u>3,3'-Dimethyl benzidine</u>	120-82-1	<u>1,2,4-Trichlorobenzene</u>
79-44-7	<u>Dimethylcarbamoyl chloride</u>	79-00-5	<u>1,1,2-Trichloroethane</u>
68-12-2	<u>Dimethyl formamide</u>	79-01-6	<u>Trichloroethylene</u>
57-14-7	<u>1,1-Dimethyl hydrazine</u>	95-95-4	<u>2,4,5-Trichlorophenol</u>
131-11-3	<u>Dimethyl phthalate</u>	88-06-2	<u>2,4,6-Trichlorophenol</u>
77-78-1	<u>Dimethyl sulfate</u>	121-44-8	<u>Triethylamine</u>
534-52-1	<u>4,6-Dinitro-o-cresol, and salts</u>	1582-09-8	<u>Trifluralin</u>
51-28-5	<u>2,4-Dinitrophenol</u>	540-84-1	<u>2,2,4-Trimethylpentane</u>
121-14-2	<u>2,4-Dinitrotoluene</u>	108-05-4	<u>Vinyl acetate</u>
123-91-1	<u>1,4-Dioxane (1,4-Diethyleneoxide)</u>	593-60-2	<u>Vinyl bromide (Bromoethene)</u>
122-66-7	<u>1,2-Diphenylhydrazine</u>	75-01-4	<u>Vinyl chloride (Chloroethene)</u>
106-89-8	<u>Epichlorohydrin (1-Chloro-2,3-epoxypropane)</u>	75-35-4	<u>Vinylidene chloride (1,1-Dichloroethylene)</u>
106-88-7	<u>1,2-Epoxybutane</u>	1330-20-7	<u>Xylenes (isomers and mixture)</u>
140-88-5	<u>Ethyl acrylate</u>	95-47-6	<u>o-Xylenes</u>
100-41-4	<u>Ethyl benzene</u>	108-38-3	<u>m-Xylenes</u>
51-79-6	<u>Ethyl carbamate (Urethane)</u>	106-42-3	<u>p-Xylenes</u>
75-00-3	<u>Ethyl chloride (Chloroethane)</u>	n/a	<u>Antimony Compounds</u>
106-93-4	<u>Ethylene dibromide (1,2-Dibromoethane)</u>	n/a	<u>Arsenic Compounds (inorganic including arsine)</u>
107-06-2	<u>Ethylene dichloride (1,2-Dichloroethane)</u>	n/a	<u>Beryllium Compounds</u>
107-21-1	<u>Ethylene glycol</u>	n/a	<u>Cadmium Compounds</u>
151-56-4	<u>Ethylene imine (Aziridine)</u>	n/a	<u>Chromium Compounds</u>
75-21-8	<u>Ethylene oxide</u>	n/a	<u>Cobalt Compounds</u>
96-45-7	<u>Ethylene thiourea</u>	n/a	<u>Coke Oven Emissions</u>
75-34-3	<u>Ethylidene dichloride (1,1-Dichloroethane)</u>	n/a	<u>Cyanide Compounds1</u>
50-00-0	<u>Formaldehyde</u>	n/a	<u>Glycol ethers2</u>
76-44-8	<u>Heptachlor</u>	n/a	<u>Lead Compounds</u>
118-74-1	<u>Hexachlorobenzene</u>	n/a	<u>Manganese Compounds</u>
87-68-3	<u>Hexachlorobutadiene</u>	n/a	<u>Mercury Compounds</u>
77-47-4	<u>Hexachlorocyclopentadiene</u>	n/a	<u>Fine mineral fibers3</u>
67-72-1	<u>Hexachloroethane</u>	n/a	<u>Nickel Compounds</u>
822-06-0	<u>Hexamethylene-1,6-diisocyanate</u>	n/a	<u>Polycyclic Organic Matter4</u>
680-31-9	<u>Hexamethylphosphoramide</u>	n/a	<u>Radionuclides5 (including radon)</u>
110-54-3	<u>Hexane</u>	n/a	<u>Selenium Compounds</u>
302-01-2	<u>Hydrazine</u>		

For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

- **^1** X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂
- **^2** Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' where n = 1, 2, or 3
R = alkyl C7 (chain of 7 carbon atoms) or less; or phenyl or alkyl substituted phenyl
R' = H or alkyl C7 or less; or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate. Polymers are excluded from the glycol category, as well as surfactant alcohol ethoxylates (where R is an alkyl C8 or greater) and their derivatives, and ethylene glycol monobutyl ether (CAS 111-76-2).
 - **^3** Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
 - **^4** Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 °C.
 - **^5** A type of atom which spontaneously undergoes radioactive decay.

Sources: USEPA's original list & Modifications

