


Think that EPA and DEC regulations  
are protecting American farmland  
and food production?

A silver metal fork is held horizontally, with a large, dark brown, crumbly pile of soil resting on its tines. Below the fork, a white ceramic plate is filled with a larger pile of the same dark, crumbly soil. The background is plain white.

Think again,  
the story's on the other side  
of this flyer.

## SEWAGE SLUDGE AKA BIOSLUDGE AKA BIOSOLID CLASS A AND CLASS B CONTENTS

Compiled 12-27-10 by the Center of Sludge Information. **Federal and state regulations limit concentrations of only 9 heavy metals and one pathogen - in the red font.**

**Heavy Metals** - Aluminum, Antimony, **Arsenic**, Barium, Beryllium, Bismuth, Boron, Bromine, **Cadmium**, Cerium, Cesium, Chromium, **Copper**, Dysprosium, Erbium, Europium, Gadolinium, Germanium, Gold, Hafnium, Holmium, Iron, Lanthanum, Lutetium, **Lead**, Magnesium, Manganese, **Mercury, Molybdenum, Nickel**, Niobium, Palladium, Praseodymium, Rhodium, Rubidium, Ruthenium, Samarium, Scandium, **Selenium**, Silver, Strontium, Tantalum, Tellurium, Terbium, Thallium, Thorium, Thulium, Tin, Titanium, Tungsten, Uranium, Vanadium, Yttrium, Ytterbium, **Zinc** **Pathogens - Bacteria - Fecal Coliform**, Salmonella 2000 types, Shigella 4 spp., E. coli 0157:H7, Staphylococcus aureus, Enteropathogenic E. coli, Yersinia enterocolitica, Campylobacter jejuni, Vibrio cholera, Leptospira, Listeria, Helicobacter, Mycobacteria, Aeromonas, Legionella, Burkholderia, Endotoxins, antibiotic resistant bacteria

**Viruses** - Adenovirus, Astrovirus, Calcivirus, Coronavirus, Enterovirus, Poliovirus, Coxsackie A, Coxsackie B, Echovirus, Enterovirus 68 - 72, Hepatitis A virus, Hepatitis E virus, Norwalk Virus, Reovirus, Rotavirus, **Protozoa** - Cryptosporidium, Entamoeba histolytica, Giardia lamblia, Balantidium coli, Toxoplasma gondii

**Helminths (Parasites)** - Ascaris lumbricoides (roundworm), Ancylostoma duodenale (hookworm), Necator americanus (hookworm), Taenia saginata (tapeworm), Trichuris (whipworm), Toxocara (roundworm) Strongyloides (threadworm), Ascaris suum, Toxocara canis, Taenia solium, Hymenolepis nana

**Fungi** - Aspergillus fumigatus, Candida albicans, Cryptococcus neoformans, Epidermophyton spp., Trichophyton spp., Trichosporon spp., Phialophora spp.,

**Prions** (spongiform encephalopathy)

**Synthetic Chemicals - Dioxins & Furans** Octachlorodibenzo-P-Dioxin, 1,2,3,4,6,7, 8-Heptachlorodibenzo-P-Dioxin, Octachlorodibenzo Furan, 1,2,3,4,6,7,8 Heptachlorodibenzo-Furan (71), 2,3,7,8-Tetrachlorodibenzo-Furan, 1,2,3,6,7,8 Hexachlorodibenzo-P-Dioxin, 1,2,3,4,7,8-Hexachlorodibenzo-Furan, 1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin, 1,2,3,6,7,8-Hexachlorodibenzo-Furan, 2,3,4,6,7,8-Hexachlorodibenzo-Furan, 1,2,3,4,7,8,9-Heptachlorodibenzo-Furan, 2,3,4,7,8-Pentachlorodibenzo-Furan, 1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin, 1,2,3,7,8-Pentachlorodibenzo-Furan, 1,2,3,7,8 Penta-chlorodibenzo-P-Dioxin, 1,2,3,7,8,9-Hexachlorodibenzo-Furan, 2,3,7,8-Tetrachlorodibenzo-P-Dioxin, Polychlorinated Dibenzodioxin/Polychlorinated Dibenzofuran (PCDD/PCDF), Tetrahydrofuran, 2,4-D, 2, 4,5-T, dioxin (TCDD) **Organics (carbon-based)** Acetones, Chloroform, Cyclohexanone, Bis(2-ethylhexyl) Phthalate, Bis(2-ethylhexyl), tetrabromophthalate, Di-n-undecyl phthalate, Alkyl benzyl Phthalate, Di-(2-Ethylhexyl) Phthalate, (DEHP). Butyl Benzyl Phthalate, Toluene, 2-Propanone, Methylene Chloride, Hexanoic Acid, 2-Butanone, Methyl Ethyl Ketone, Alcohol Ethoxylate, Alkylphenoethoxylates, Phenol, Nonylphenol, 2,2'-methylenebis[4-methyl-6-nonyl-Phenol, p-Nonylphenol, 4,4'-butylidenebis[2-(1,1-dimethylethyl)-5-methyl-,4-Methylphenol, Phenol, 4,4'-(1-methylethylidene) bis[2-(1,1-dimeth, Phenol, 4,4'-(1-methylethylidene) bis(2-(1,1-dimeth, 2,4-dicumylphenol, p-Dodecylphenol, 2,4,5-Trichlorophenol, N-Hexacosane, N-Tetracosane, N-Dodecane, N-Tetradecane, N-Triacontane, N-Eicosane, N-Hexadecane, N-Octacosane, Carbon Disulfide, N-Decane, N-Docosane, N-Octadecane, P-Cymene, Benzo(B)fluranthene, Fluoranthene, P-Chloroaniline, Pyrene, Tetrachloromethane, Trichlorofluoromethane, 2-Hexanone, 2-Methylnaphthalene, 4-Chloroaniline, Benzo(a)pyrene

**Pesticides & Insecticides** Aldrin, Chlordane, Cyclohexane, Heptachlor, Endosulfan, Endosulfan-II, Lindane, Dieldrin, Endrin, DDT, DDD, DDE, 2,4,5-Trichlorophenoxyacetic Acid, Acetic Acid (2,4-Dichlorophenoxy), 2,4,5-Trichlorophenoxypropionic Acid, Pentachloronitrobenzene, Chlorobenzilate, Beta-BHC, Kepone, Mirex, Methoxychlor, **PCBs**- PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, PCB-1260,

**PBDEs (PolyBrominated Diphenyl Ethers)** BDE-28, BDE-47, BDE-66, BDE-85, BDE-99, BDE-100, BDE-138, BDE-153, BDE-154, BDE-183, BDE-209

**Hydrocarbons, Petrochemicals, Organochlorines** PCBs, PCT, PBB, PBT, Anthracene, Pentachlorophenol, Benzo(g,h,i)perylene, Benzene, Benzene, C14-C24-branched, Polyethylbenzene residue, Octane, Hexachlorobenzene, Ethylbenzene, Chlorinated Benzenes, Naphtha (petroleum), turpentine-oil, Hydrotreated kerosene, Hydrocarbon oils, Hydrocarbons, C10 and C12, Distillates (petroleum), Fuel oil, Creosols, P-Cresol, O-Cresol, 2-(2H-Benzotriazol-2-yl)-p-cresol, Hexachlorobutadiene, N-Nitrosodimethylamine, Toxaphene, Trichloroethane, Tetrachloroethane, Hexachloroethane, Carbon Tetrachloride, Dichloroethylene, Trichloroethylene, Tetrachloroethylene, Xylene **Pharmaceuticals** 1,7-Dimethylxanthine, 4-Epianhydrochlorotetracycline, 4-Epianhydrotetracycline, 4-Epichlortetracycline, 4-Epoxytetracycline, 4-Epitetracycline, Acetaminophen, Albuterol, Anhydrochlorotetracycline, Azithromycin, Caffeine, Carbadox, Carbamazepine, Cefotaxime, Chlortetracycline, Cimetidine, Ciprofloxacin, Clarithromycin, Clinafloxacin, Cloxacillin, Codeine, Cotinine, Dehydronifedipine, Demeclocycline, Digoxigenin, Digoxin, Diltiazem, Diphenhydramine, Doxycycline, Enrofloxacin, Erythromycin-Total, Flumequine, Fluoxetine, Gemfibrozil, Ibuprofen, Isochlortetracycline, Lincomycin, Lomefloxacin, Metformin, Miconazole, Minocycline, Naproxen, Norfloxacin, Norgestimate, Ofloxacin, Ormetoprim, Oxacillin, Oxolinic Acid, Oxytetracycline, Penicillin G, Penicillin V, Ranitidine, Roxithromycin, Sarafloxacin, Sulfachloropyridazine, Sulfadiazine, Sulfadimethoxine, Sulfamerazine, Sulfamethazine, Sulfamethizole, Sulfamethoxazole, Sulfanilamide, Sulfathiazole, Tetracycline, Thiabendazole, Triclocarban, Triclosan, Trimethoprim, Tylosin, Virginiamycin, Warfarin

**Steroids & Hormones** 17 Alpha-Dihydroequilin, 17 Alpha-Estradiol, 17-Alpha-Ethinyl-Estradiol, 17-Beta-Estradiol, Androstenedione, Androsterone, Beta Stigmastanol, Campesterol, Cholestanol, Cholesterol, Desmosterol, Epicoprostanol, Equilenin, Ergosterol, Estriol, Estrone, Ethinylestradiol, Norethindrone, Norgestrel, Progesterone, Stigmasterol, Sitostanol, Beta-Estradiol 3-Benzoate, Beta-Sitosterol, Equilin, Testosterone