



GLOBAL WATER RESOURCES (“GLOBAL WATER”)

DESIGN STANDARD

DEFINITIONS

PROHIBITED WASTE

Prohibited Waste means material or waste streams that shall not be discharged to collection systems operated by Global Water. Specifically, this includes:

Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

Flammable or Explosive Waste

Any waste which, by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

Reactive Waste

Any waste which, by itself or in combination with another substance, is capable of causing or contributing to an undesirable physical or chemical reaction when introduced to sanitary sewer systems, including: endothermic reactions, exothermic reactions, precipitation etc.

Obstructive Waste

Any waste which, by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl, and solidified fat.



Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

High Temperature Waste

A high temperature waste is:

- a. Any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;
- b. Any waste which will raise the temperature of waste entering any sewage facility to 40 degrees Celsius (104 degrees Fahrenheit) or more;
- c. Any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.

Biomedical Waste

Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiological waste, waste sharps and untreated human blood and body fluids.

Miscellaneous Prohibited Wastes

Any waste, other than sanitary waste, which by itself or in combination with another substance:

- a. constitutes or may constitute a significant health or safety hazard to any person;
- b. may interfere with any sewer or sewage treatment process;
- c. may cause a discharge from a sewage facility to contravene any requirements by or under any ADEQ APP or AzPDES discharge permit or any other act, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation; or



- d. may cause biosolids to fail criteria for beneficial land application.

RESTRICTED WASTE

Restricted waste means wastes that may be permitted to be discharged to collection systems operated by Global Water, but have specific criteria which must be met prior to that discharge. These include:

Food Waste

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimeters in any dimension.

Radioactive Waste

Any waste containing radioactive materials that, at the point of discharge into a sewer, exceeds radioactivity limitations as established by regulatory agencies.

pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 6 or higher than 9.0, as determined by either a grab or a composite sample.

Dyes and Coloring Material

Dyes or coloring materials which may pass through a sewage facility and discolor the effluent from a sewage facility except where the dye is used by Global Water, or one or more of its agents, as a tracer.

Miscellaneous Restricted Wastes

Any of the following wastes:

- a. seawater
- b. PCBs
- c. chlorinated phenols¹

¹ Chlorinated phenols include:

- chlorophenol (ortho, meta, para)
- dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-)
- trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-)



d. pesticides

e. tetrachloroethylene

Specified Waste

Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out AAC R18-4 *et seq.* or as more specifically defined in the tables below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

RESTRICTED WASTE – DEFINITION OF LIMITS CONVENTIONAL CONTAMINANTS [mg/L]	
Biochemical Oxygen Demand (BOD)	350
Chemical Oxygen Demand (COD)	700
Oil and Grease ²	100
Suspended Solids	350

RESTRICTED WASTE – DEFINITION OF LIMITS ORGANIC CONTAMINANTS [mg/L]	
Benzene	0.004
Ethyl Benzene	0.56
Toluene	0.8

- tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-)
- pentachlorophenol

² Total oil and grease includes oil and grease (hydrocarbons) (see Organic Contaminants Table)

RESTRICTED WASTE – DEFINITION OF LIMITS ORGANIC CONTAMINANTS [mg/L]	
Xylenes	8
Polynuclear Aromatic Hydrocarbons (PAH) ³	0.0002
Phenols	0.001
Oil and Grease (hydrocarbons)	15

RESTRICTED WASTE – DEFINITION OF LIMITS INORGANIC CONTAMINANTS [mg/L]	
Antimony (Sb)	0.0048
Arsenic (As)	0.010
Barium (Ba)	1.6
Beryllium (Be)	0.0032
Cadmium (Cd)	0.004
Chloride (Cl)	1500

³ Note: Polynuclear Aromatic Hydrocarbons (PAH) include:

- a. naphthalene benzo(a)anthracene
- b. acenaphthylene chrysene
- c. acenaphthene benzo(b)fluoranthene
- d. fluorene benzo(k)fluoranthene
- e. phenanthrene benzo(a)pyrene
- f. anthracene dibenzo(a,h)anthracene
- g. fluoranthene indeno(1,2,3-cd)pyrene
- h. pyrene benzo(g,h,i)perylene

RESTRICTED WASTE – DEFINITION OF LIMITS INORGANIC CONTAMINANTS [mg/L]	
Chromium (Cr)	0.08
Cobalt (Co)	5
Copper (Cu)	0.0175
Cyanide (Cn)	0.0079
Fluoride (F)	3.2
Iron (Fe)	50
Lead (Pb)	0.006
Manganese (Mn)	5
Mercury (Hg)	0.0002
Molybdenum (Mo)	5
Nickel (Ni)	0.08
Selenium (Se)	0.002
Silver (Ag)	0.0992
Sulfate (SO ₄)	1500
Sulfide (S)	0.05
Thallium (Tl)	0.0016
Zinc (Zn)	0.138