

# Permit to Operate a Waterworks Packages

#### **Chemical - General**

Total alkalinity, P. alkalinity, Bicarbonate, Carbonate, Hydroxide, Calcium, Chloride, Fluoride, Magnesium, Nitrate, pH, Potassium, Sodium, Specific conductivity, Sulfate, Sum of ions, Total hardness, Total Dissolved Solids

#### Chemical - Health

Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Selenium, Silver, Uranium, Zinc

#### **Pesticides**

Atrazine, Bromoxynil (Buctril), Carbofuran, Chlorpyrifos (Lorsban), Dicamba (Banvel), 2,4-D, Diclofop-methyl (Hoegrass), Dimethoate (Cygon), Malathion, MCPA, Pentachlorophenol (PCP), Picloram (Tordon), Trifluralin (Treflan)

## **Trihalomethanes (THMs)**

THM1: Chloroform, THM2: Bromodichloromethane, THM3: Chlorodibromomethane, THM4: Bromoform, Total trihalomethanes (calc.)

#### **Haloacetic Acids**

Bromochloroacetic acid, Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid, Total haloacetic acids, 5 (calc.); Total haloacetic acids, 6 (calc.); Trichloroacetic acid

#### Synthetic Organics\*\*

Benzene, Benzo(a)pyrene, Carbon tetrachloride, 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; 1,2-Dichloroethane; 1,1-Dichloroethylene; Dichloromethane, 2,4-Dichlorophenol; Ethylbenzene, Chlorobenzene, Tetrachloroethylene, 2,3,4,6-Tetrachlorophenol, Toluene, Trichloroethylene, 2,4,6-Trichlorophenol, Vinyl chloride, m+p-Xylene, o-Xylene, Total Xylene

\*\* If your permit includes Perfluorooctane sulfonate (PFOS) and Perfluorooctanoic acid (PFOA) contact the laboratory.

#### Radiological - Extended

Lead-210, Radium-226, Tritium, Strontium-90, Iodine-131, Cesium-137, Potassium-40



# Permit to Operate a Sewage Works Packages

#### **Group 1 Panel**

Specific conductivity, Chloride, Nitrate as nitrogen, Total coliform, E. coli, Field pH (by Client), Field Temperature (by Client)

#### **Group 2 Panel**

Carbonaceous, Biochemical oxygen demand (C-BOD); Chloride, Total suspended solids, Total coliform, E. coli, Field pH (by Client), Field Temperature (by Client)

#### **Group 4 Panel**

Carbonaceous, Biochemical oxygen demand (C-BOD); Chloride, pH at 15°C, Total suspended solids, Phosphorus, Total nitrogen, Ammonia as nitrogen, Nitrite+Nitrate as nitrogen, Total Kjeldahl nitrogen, Calculated Un-ionized ammonia (using pH @15°C), Total coliform, E. coli

## **Group 4 Panel + Cond & TDS (Receiving Environment)**

Carbonaceous, Biochemical oxygen demand (C-BOD); Chloride, Specific Conductivity, pH at 15°C, Total suspended solids, Phosphorus, Total nitrogen, Ammonia as nitrogen, Nitrite+Nitrate as nitrogen, Total Dissolved Solids, Total Kjeldahl nitrogen, Calculated Unionized ammonia (using field temp and pH), Total coliform, E. coli, Field pH (by Client), Field Temperature (by Client)

### **Major Ions Scan**

Total alkalinity, P. alkalinity, Bicarbonate, Carbonate, Hydroxide, Calcium, Chloride, Fluoride, Magnesium, Nitrate, pH, Potassium, Sodium, Specific conductivity, Sulfate, Sum of ions, Total hardness

# Major Ions Scan plus TDS and Conductivity (General Chemistry Package)

Total alkalinity, P. alkalinity, Bicarbonate, Carbonate, Hydroxide, Calcium, Chloride, Fluoride, Magnesium, Nitrate, pH, Potassium, Sodium, Specific conductivity, Sulfate, Sum of ions, Total hardness, Total Dissolved Solids

#### Trace Metals Package (plus Mercury)

Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury\*, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Tin, Titanium, Uranium, Vanadium, Zinc

\*Mercury is not included in metals pkg, will be added separately)

#### **Effluent Irrigation Panel**

Carbonaceous, Biochemical oxygen demand (C-BOD); Chloride, Specific conductivity, pH at 15°C, Total suspended solids, Phosphorus, Total nitrogen, Ammonia as nitrogen, Nitrite+Nitrate as nitrogen, Total Dissolved Solids, Total Kjeldahl nitrogen, Total coliform, E. coli, Calcium, Sodium, Magnesium, Sodium Adsorption Ratio (SAR), Boron, Copper, Iron, Manganese

#### Effluent Irrigation - Soil

pH, Specific conductivity, Sodium Adsorption Ratio (SAR), Calcium, Magnesium, Sodium, Potassium, Sulfate, Chloride, Ammonia as nitrogen, Nitrite, Nitrate, Phosphorus, Aluminum, Arsenic, Antimony, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Uranium, Vanadium, Zinc