



# บริการตรวจวิเคราะห์คุณภาพน้ำทิ้ง

(Service inspection of wastewater quality)

## Suggestions for wastewater sample containers

Parameters	Container and Volume sample	Treatment Conditions
pH, EC, Color, SS, Settleable Solids, TDS, BOD	Plastic PP/ PE 2,000 ml	Refrigerate at 4 °C
Sulfide	BOD bottle 300 ml	2N Zn(C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> ) 0.6 ml Refrigerate at 4 °C
TKN, COD	Plastic PP/ PE 1,000 ml	H <sub>2</sub> SO <sub>4</sub> Conc. 3-4 ml (pH<2) Refrigerate at 4 °C
Grease and Oil	Glass bottle 1,000 ml	HCl Conc. 3-4 ml (pH<2) Refrigerate at 4 °C
DO	BOD bottle 300 ml	MnSO <sub>4</sub> 1 ml. & Alkali Iodide Azide 1 ml. Refrigerate at 4 °C
Total Coliform Bacteria (TCB) Fecal Coliform Bacteria (FCB)	Bacteria sample bottle 100 ml	Refrigerate at 4 °C
Heavy Metals (Zn, Cr, Cu, Cd, Pb, Ni, Mn)	Plastic PP/ PE 500 ml	HNO <sub>3</sub> 3-4 ml (pH<2) Refrigerate at 4 °C

## Parameter analysis of wastewater

No	Parameters	Methods
1	pH	pH meter
2	Conductivity ( EC)	Conductivity meter
3	Color	Visual Comparison Method
4	Suspended Solids (SS)	Dried at 103 – 105 °C
5	Settleable Solids	Imhoff cone
6	Total Dissolved Solids (TDS)	Dried at 180 °C
7	Sulfide	Iodometric Method
8	Total Kjeldahl Nitrogen (TKN)	Kjeldahl Method
9	Grease and Oil	Soxhlet Extraction Method
10	Biochemical Oxygen Demand (BOD)	Azide Modification ( at 20 °C for 5 days)
11	Dissolved Oxygen (DO)	Azide Modification
12	Chemical Oxygen Demand (COD)	Opened Reflux
13	Total Coliform Bacteria (TCB)	MPN Technique
14	Fecal Coliform Bacteria (FCB)	MPN Technique
15	Heavy Metals (Zn, Cr, Cu, Cd, Pb, Ni, Mn)	AAS (Flame)