

Lampiran Pengumuman:	1188.12.Peng/SCM/PLN-NPS/2024
Tanggal	:30 September 2024

BILL OF QUANTITY (BOQ)

Pengadaan Kontrak Payung Bahan Kimia Unit PLTU Ampana Periode November 2024 - April 2025

No	ITEM BARANG/JASA	Jumlah	Satuan
1.	Material Kimia Operasi		
1.a.	Tri Sodium Phosphate (Na ₃ PO ₄), TSP, PH 1% : 12.00 – 12.50, Na ₃ PO ₄ : = 95%, Cl ₂ : < 0.02% atau < 200 ppm, Wujud : powder, Warna : putih, Packing 15 kg/pail	240	Kg
1.b.	Ammonia (NH ₄ OH), Konsentrasi NH ₃ 25 % , SG : 0.90 – 0.93 g/ml (25 oC), pH : 12 – 13.5, Cl ₂ : < 0.02%, Wujud : liquid , Warna : putih jernih, Packing 25 kg/pail	1000	Kg
1.c.	Hydrazine (N ₂ H ₄), Konsentrasi N ₂ H ₄ : Min 35 % , SG : 1.015 – 1.04 g/ml (25 oC), pH : 11 – 12.1, Cl ₂ : < 0.02%, Wujud : liquid , Warna : putih jernih, Packing 25 kg/pail	500	Kg
1.d.	Poly Aluminium Chloride , Coagulant, Konsentrasi PAC : 60 , 100%, Specific gravity: 1.34 (25 °C) , Wujud : powder, Warna : kuning , Packing 25 kg/bag	75	Kg
1.e.	Polyacrylamide , Flocculant, Konsentrasi PAM : 100%, pH (1.0%) : 5.5 , 7.5, Wujud : powder, Warna : putih, Packing 25 kg/bag	75	Kg
1.f.	RO Anti Scalant, Konsentrasi anti scalant : 100%, Specific gravity : 1,203 (25 oC), pH : 10, Wujud : liquid, Warna : hijau jernih, Packing 25 kg/pail	125	Kg
1.g.	Sodium Meta Bisulfite, Konsentrasi SMBS : 60 , 100%, Specific gravity : 2,6, pH (1.0%) : 9,8, Wujud : powder, Warna : putih, Packing 25 kg/bag	75	Kg
1.h.	Hydrochloric Acid, HCL , Konsentrasi HCl : 32 % ± 1.0%, Kandungan free chlorine : = 50 ppm, Kandungan Fe : = 50 ppm, Wujud : liquid, Warna : kuning jernih, Packing 25 kg/pail	2000	Kg
1.i.	Natrium Hydroxide (NaOH), Konsentrasi NaOH : 48% ± 1%, Konsentrasi Fe : = 10 mg/kg, Konsentrasi SiO ₂ : = 100 mg/kg , Wujud : liquid, Warna : putih jernih, Packing 25 kg/pail	2000	Kg
1.j.	Alkali Cleaner RO Membrane, Konsentrasi alkali cleaner : 100%, Specific gravity : 1,000 , 1,200, pH : > 11,4, Wujud : liquid, Warna : putih jernih, Packing 25 kg/pail	150	Kg
1.k.	Alkali Cleaner booster R/O Membrane, Konsentrasi alkali cleaner : 100%, Specific gravity : 1,200 , 1,300, pH : 12 , 13, Wujud : liquid, Warna : kuning jernih, Packing 25 kg/pail	150	Kg
1.l.	Acid Cleaner RO Membrane, Konsentrasi acid cleaner : 100% , Specific gravity : 1,200 , 1,300, pH : 1 , 1,5, Wujud : liquid, Warna : putih jernih, Packing 25 kg/pail	150	Kg
1.m.	Non Oxidising Liquid Biocide, Konsentrasi biocide : 100%, Specific gravity : 1,032 , 1,040, pH : 3 , 4, Wujud : liquid, Warna : hijau jernih, Packing 25 kg/pail	50	Kg
1.n.	Sodium Hypochloride, NaOCl, Konsentrasi NaOCl : 10%, Specific gravity : 1,203 (25 oC), pH : 12 (1%), Wujud : liquid, Warna : hijau jernih, Packing 25 kg/pail	275	Kg
2.	Material Kimia Laboratorium		
2.a.	Conductivity standar solution Conductivity 500 µS/cm, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.b.	Conductivity standar solution Conductivity 1413 µS/cm, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.c.	Conductivity standar solution Conductivity 12800 µS/cm, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.d.	Buffer pH standar solution 4 PH 4, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.e.	Buffer pH standar solution 7PH 7, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.f.	Buffer pH standar solution 10PH 7, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.g.	Electrolyte Solution KCl/KCl 3,5 M, Packing 500 ml/botol, Wujud : liquid	2	Botol
2.h.	Turbidity 10 NTU Turbidity : 10 NTU, Wujud : liquid, Packing 100 ml/botol, Reff. Hach Cat. 2961801	2	Botol
2.i.	Turbidity 20 NTU Turbidity : 20 NTU, Wujud : liquid, Packing 100 ml/botol, Reff. Hach Cat. 2684801	2	Botol
2.j.	Turbidity 100 NTU Turbidity : 100 NTU, Wujud : liquid, Packing 100 ml/botol, Reff. Hach Cat. 2684901	2	Botol
2.k.	Turbidity 800 NTU Turbidity : 800 NTU, Wujud : liquid, Packing 100 ml/botol, Reff. Hach Cat. 2660501	2	Botol
2.l.	PhosVer® 3 Phosphate Reagent Powder Pillows Wujud : powder, packing : 100 pillow/pack, Cat. 2106069	14	Pack
2.m.	HidraVer 2 hidrazin reagen 100 TEST MDB Wujud : liquid, packing : 100 ml/botol, Cat. 179032, ID	14	Botol
2.n.	Ferrozine Iron Reagent Fe Wujud : liquid, packing : 500 ml/botol, Cat. 230149	2	Botol

2.o.	Amino Acid Reagent Powder Pillow (for 10 ml sample)Wujud : powder, packing : 100 pillow/pack, Cat. 2254069	120	Pack
2.p.	Citric Acid Powder Pillow (for 10 ml sample)Wujud : powder, packing : 100 pillow/pack, Cat. 2106269	120	Pack
2.q.	Molybdate 3 Reagent SolutionWujud : liquid, packing : 50 ml/botol, Cat. 199526	240	Botol
2.r.	DPD Free Chlorine Reagent Powder Pillow, 10 mLWujud : powder, packing : 100 pillow/pack, Cat. 2105569	5	Pack
2.s.	Ferric Ion SolutionWujud : liquid, packing : 100 ml/botol, Cat. 2212242	15	Botol
2.t.	Mercuric Thiocyanate SolutionWujud : liquid, packing : 200 ml/botol, Cat. 2212129	15	Botol
2.u.	Hydrazine Standard Solution Konsentrasi 1000 ppm, Wujud : liquid, packing : 500 ml/botol, Ref Cat. LC149301	1	Botol
2.v.	Iron standard Solution Konsentrasi 1000 ppm, Wujud : liquid, packing : 500 ml/botol, MERCK 119781	1	Botol
2.w.	Standard Silica SolutionKonsentrasi 1000 ppm, Wujud : liquid, packing : 500 ml/botol, Cat. 19449	1	Botol
2.x.	Chloride Standard Solution Konsentrasi 1000 ppm, Wujud : liquid, packing : 500 ml/botol, Ref. MERCK 119897	1	Botol
2.y.	Phospate Standard SolutionKonsentrasi 1000 ppm, Wujud : liquid, packing : 500 ml/botol, Ref MERCK 119898	1	Botol