Electronic Supplementary Information

A membraneless gas-trapping device for cyanide detection and quantification

Chatipat Lorpaiboon, ^{‡a, b} Wanutcha Lorpaiboon ^{‡a} and Manchuta Dangkulwanich*^{xa}

e-mail: manchuta.dan@mahidol.edu

[‡]These authors contributed equally.

^{a.} Science Division, Mahidol University International College, Mahidol University, Phutthamonthon 4 Road, Salaya, Nakhon Pathom 73170, Thailand

^{b.} Present address: Department of Chemistry, The University of Chicago, Chicago, IL, USA *Corresponding author

Fig. S1 Measured cyanide concentrations using Cyanide Test 114429 from Merck (white), freshly prepared devices (light blue), and devices stored for 20 days (gray) and 40 days (dark blue). Error bars show the standard deviation (n=10).

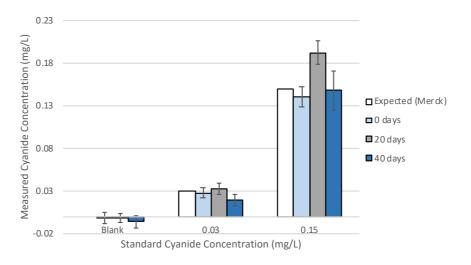


Table S1 Selectivity test for cyanide in the presence of sulfide and azide. Reported are the measured concentrations of a 0.032 ± 0.006 mg/L cyanide solution spiked with 0.03 and 0.3 mg/L of each ion using the developed device.

lon	Cyanide in Sample + 0.03 mg/L	Cyanide in Sample + 0.30 mg/L
Azide (N ₃ -)	0.029 ± 0.006	0.028 ± 0.007
Sulfide (S ²⁻)	0.027 ± 0.007	0.031 ± 0.007