Modeling the air pollutants concentrations nearby the cement

plant co-processing wastes

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Fig. S1 Schematic methodology for the study



Fig. S2 The influence of different parameters on speciation of arsenic. a) Basic system:
C, H, N, S, O; b) +Cl, a=1.2; c) Basic system + Cl + mineral contents, d) Basic system
+ Cl + mineral contents + waste (with condition of excess air coefficient setting as 1.2)



Fig. S3 The influence of different parameters on speciation of Co. a) Basic system: C, H, N, S, O; b) +Cl, a=1.2; c) Basic system + Cl + mineral contents, d) Basic system + Cl + mineral contents + waste (with condition of excess air coefficient setting as 1.2)



Fig. S4 The influence of different parameters on speciation of plumbum. a) Basic system: C, H, N, S, O; b) +Cl, a=1.2; c) Basic system + Cl + mineral contents, d) Basic system + Cl + mineral contents + waste (with condition of excess air coefficient setting as 1.2)



Fig. S5 The influence of different parameters on speciation of nickel. a) Basic system:
C, H, N, S, O; b) +Cl, a=1.2; c) Basic system + Cl + mineral contents, d) Basic system
+ Cl + mineral contents + waste (with condition of excess air coefficient setting as 1.2)



Fig. S6 The influence of different parameters on speciation of cadmium. a) Basic system: C, H, N, S, O; b) +Cl, a=1.2; c) Basic system + Cl + mineral contents, d) Basic system + Cl + mineral contents + waste (with condition of excess air coefficient setting as 1.2)