Supplementary Materials: Activation of Peroxymonosulfate by Chrysotile to Degrade Dyes in Water: Performance Enhancement and Activation Mechanism

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Figure S1. The XRD pattern of raw chrysotile from asbestos tailings.

Figure S2. The Zeta potentials and points of zero charge of 850CC and raw chrysotile.
Figure S3. The TG-DTA curves of chrysotile (a), FTIR spectra (b) and XRD patterns (d) of chrysotile with different calcination temperatures, and comparison of reusability between 850CC and raw chrysotile (c).

Figure S4. Nitrogen isotherm adsorption-desorption curves (a) and pore size distribution curves (b) of raw chrysotile and 850CC.
Figure S5. Effects of the radical scavengers on RhB degradation in 850CC/PMS system: TBA (a), MA (b), p-BZ (c) and LH (d).

Figure S6. The SEM images (a) and XRD patterns of forsterite (b).
Table S1. The element composition of raw chrysotile, 850CC and natural forsterite.

| Composition | Chrysotile (%) | 850CC (%) | Natural Forsterite (%) |
|-------------|---------------|-----------|------------------------|
| Si          | 28.17         | 31.51     | 19.08                  |
| Mg          | 27.18         | 29.90     | 28.90                  |
| O           | 38.14         | 32.33     | 44.68                  |
| Al          | 0.41          | 0.42      | 0.075                  |
| Fe          | 3.15          | 2.08      | 7.16                   |
| Ca          | 2.75          | 3.04      | 0.078                  |
| Ni          | 0.04          | 0.08      | 0.01                   |
| S           | 0.13          | 0.61      | 0.01                   |
| Ti          | 0.03          | 0.03      | 0.004                  |