

*Supplement of*

**Modeling the impact of heterogeneous reactions of chlorine on  
summertime nitrate formation in Beijing, China**

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**Table S1 Emissions of conventional chemical species in Beijing in 2017 (Unit: t)**

Sector	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	VOCs
Power Plant	842	6267	675	823	70
Industry	7421	19867	4545	7059	222046
Residential	12121	10472	14614	19424	53938
Transportation	2365	92024	5080	5255	69908

**Figure S1 The spatial distribution of pH in June**

