

Accepted Manuscript

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PII: S0959-6526(17)32639-2

DOI: [10.1016/j.jclepro.2017.10.332](https://doi.org/10.1016/j.jclepro.2017.10.332)

Reference: JCLP 11124

To appear in: *Journal of Cleaner Production*

Received Date: 30 December 2016

Revised Date: 19 October 2017

Accepted Date: 30 October 2017

Please cite this article as: Zhang Y, Qi J, Chen J, Li X, Nie T, Wu Q, Source apportionment of PM_{2.5} pollution in the central six districts of Beijing, China, *Journal of Cleaner Production* (2017), doi: 10.1016/j.jclepro.2017.10.332.

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Source apportionment of PM_{2.5} pollution in the central six districts of Beijing, China

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Abstract

Fine particulate matter (PM_{2.5}) has become the primary atmospheric pollutant in Beijing in recent years, causing widespread concern in society. Understanding the origin of PM_{2.5} is essential for developing effective strategies to reduce PM_{2.5}. In this study, we used the Particulate Matter Source Apportionment Technology (PSAT) in Comprehensive Air Quality Model with Extensions (CAMx) to quantify the contributions of different source regions and emission categories to the PM_{2.5} concentration in the central six districts of Beijing in January, April, July and October, representing four seasons in 2014. The annual contribution ratios from local, suburb and the surrounding regions of Beijing as well as the outside of boundary region were 47.6, 19.3,

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