Environmental Engineering and Management Journal

December 2021, Vol. 20, No. 12, 2077-2086 http://www.eemj.icpm.tuiasi.ro/; http://www.eemj.eu



"Gheorghe Asachi" Technical University of lasi, Romania



IMPACT MECHANISMS OF ENVIRONMENTAL RULES ON HAZE POLLUTION: AN EXAMINATION WITH THE MEDIATION EFFECT

Xinfei Li¹, Baodong Cheng^{1*}, Jinzhu Zhang¹, Ling Wang², Yuan Tian²

¹School of Economics and Management, Beijing Forestry University, Beijing, 100083, China ²Business College, Beijing Union University, Beijing, 100025

Abstract

This paper selects 216 China cities data from 2003 to 2016 to examine the impact of environmental regulations on environmental quality, and further analyze the intermediary effects of industrial structure, green construction and technological level on the relationship between the two. The test results show: (1) Across the country, environmental regulations have an inverted U-shaped relationship with the PM2.5 index, that is, environmental regulations at a relatively low level cannot control environmental pollution and require higher-strength environmental regulations to regulate them. (2) Across the country, industrial institutions, green construction and technological levels will indirectly affect the impact of environmental regulations on smog. There is a partial intermediary effect, that is, environmental regulations can not only directly affect smog density, but also through industrial organizations, Green construction and technological level affect the inverted U-shaped relationship. (3) The impact of environmental regulations on the smog in eastern, central and western China is heterogeneous.

Key words: environmental regulation, haze pollution, mediation effect, regional heterogeneity

Received: March, 2021; Revised final: July, 2021; Accepted: October, 2021; Published in final edited form: December, 2021

^{*} Author to whom all correspondence should be addressed: e-mail: baodongcheng@163.com, Phone: 86-1881310213