

Does Cleaning the Air Affect Workers' Health? How Firms Manage Multiple Regulatory Demands

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ABSTRACT: Most firms in the U.S. are simultaneously required to comply with standards set by multiple regulatory agencies. While these agencies act to promote compliance with their own standards, rarely (if ever) do they consider how their actions might affect firms' ability to comply with standards in other regulatory domains. This paper investigates whether and why such regulatory spillover effects occur by analyzing how firms trade off potentially competing regulatory demands. On the one hand, heightened oversight in one regulatory domain may lead firms to substitute effort away from performance in other domains. On the other hand, if there are complementarities in the production function of compliance, the opposite could be true. To shed light on this question, I use exogenous variation in the stringency of air quality regulation induced by a 2004 revision to the Clean Air Act's ozone standard to study how environmental regulation affects plants' occupational safety and health regulatory compliance and performance. I find that, on average, air quality regulation leads plants to worsen their compliance with safety and health standards. The effect only holds for relatively small plants, where compliance effort across domains are most likely substitutes, and there is no effect on standards for which compliance complementarities with air quality standards are most likely. Furthermore, air quality regulation leads plants to experience higher rates of injuries and illnesses, which a back-of-the-envelope calculation suggests resulted in social costs due to the 2004 ozone standard of \$11 million per year.